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CHILDREN'S DIGEST

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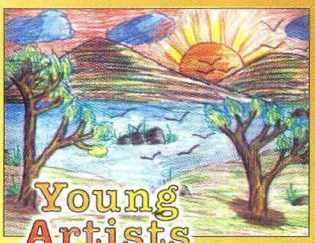

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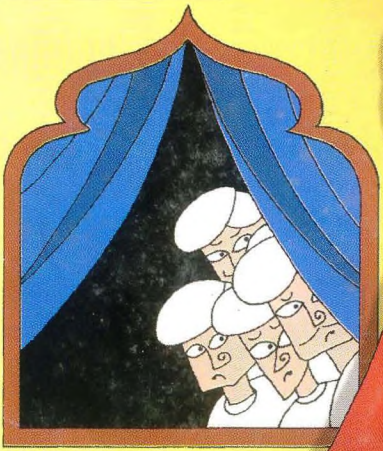

Stories for Little Angels

Birbal Goes to Heaven

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Plus Towards Better English • A Leaf out of Literature • Fun Time • Quiz Time, etc.

Butterflies

Monarch

Butterflies are among the most beautiful and marvellous creatures in all of nature. Tropical Central and South America is the richest region in the world for butterflies, but they are found in many other places as well. Costa Rica has over 1300 species.

A butterfly's life begins with a very tiny egg laid on a leaf. From this develops a larva, the butterfly's caterpillar stage. Eventually, the larva makes a cocoon or chrysalis. Safe inside, it develops into a pupa. Eventually, a beautiful butterfly is released from this container, flying heavenward, fully-developed. What an astounding transformation, from a humble, earth bound worm-like creature to a delicate flying wonder!

The adult usually returns to the very plant or tree trunk where it grew up. There it lays its own eggs and begins the process anew. Here are some of the interesting facts:

- The colour in a butterfly's wings does not come from pigment. The colour is produced prism-like by light reflected by their transparent wing scales.
- Stranger yet, no moth or butterfly eats solid food (though some butterflies drink nectar); some cannot even take in moisture.
- The life span of most butterflies is very short, usually just enough to lay their eggs.
- The world's fastest butterfly is the Monarch with a record of 17 miles per hour.
- The largest butterfly in the world is the Giant Birdwing from the Solomon Islands. The female can have a wing span of over 12 inches, that's over a foot long!

Giant Birdwing

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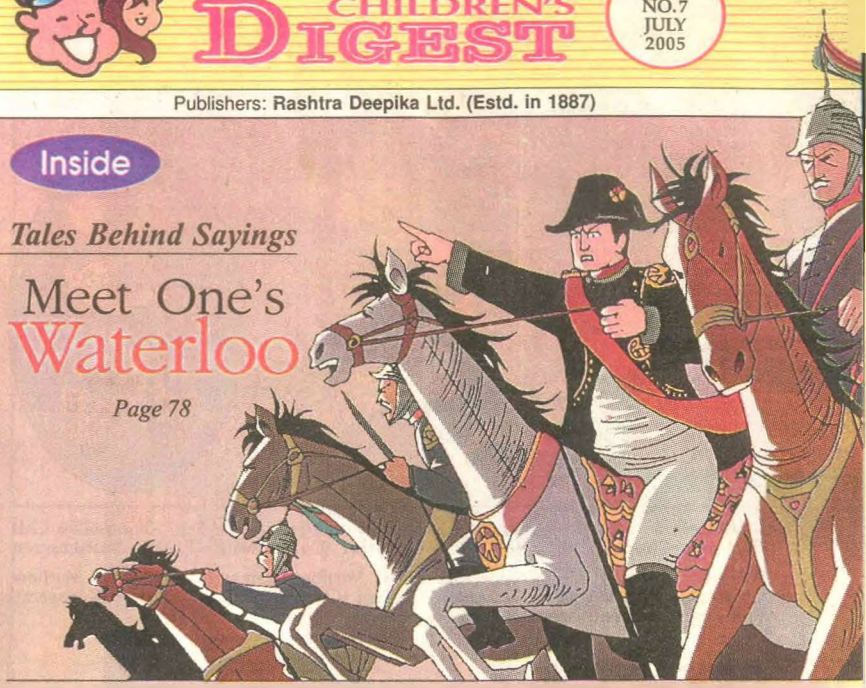

Feature

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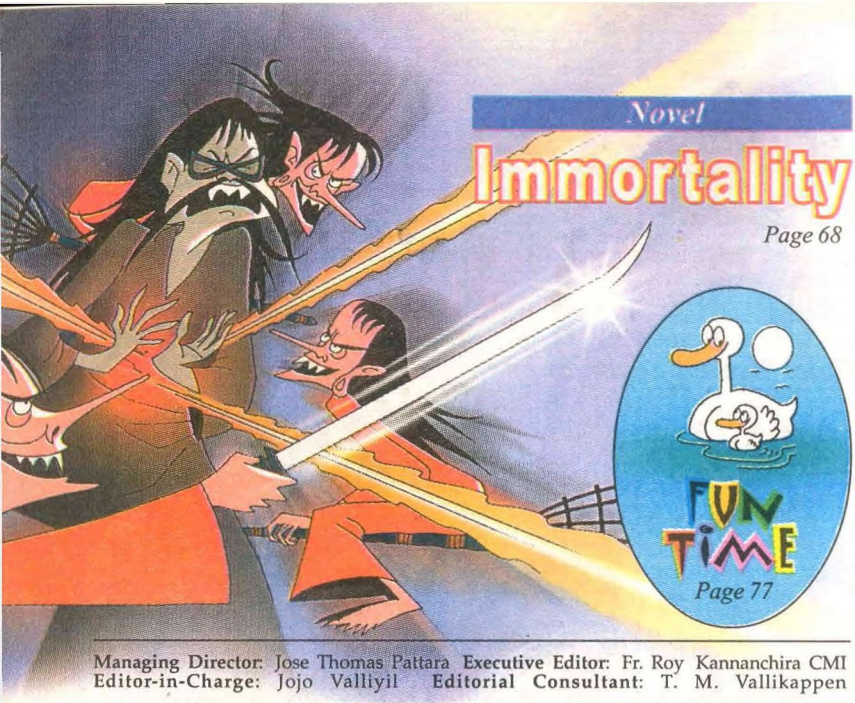
Thought for the Month

So much has been given to me, that I have no time to ponder over that, which has been denied.

-Helen Keller



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Slylock Fox

The night watchman claims a robber sneaked up behind him and bound, gagged and blindfolded him. Then he says the thief drove a green truck onto the construction site and loaded valuable tools and equipment into it before speeding away. Slylock Fox suspects the guard is lying and may be the robber's accomplice. Why? *(See page 97)*

Stories for Little Angels

- Gayathri Krishnan, Erode

Birbal Goes to Heaven

Birbal was very wise and witty and was rather a favoured noble in Akbar's durbar. This, needless to say, invited the jealousy of many useless courtiers. Many times they hatched plots (though most of them fizzled out like damp fireworks), to throw Birbal out of the Emperor's favour. Once, a handful of them sought the royal barber's help to oust Birbal.

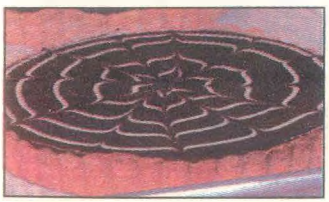
One morning the barber was shaving Akbar's beard and as he went 'snip, snap' the barber started praising Akbar's dead ancestors.

'It is years since Your Majesty's royal father died. Would we not like to know how he is in the Heavens and if he needs something from below? I think it would be nice if we can send Birbal to heaven to enquire about the well-being of your great father.'

Akbar realized that the devilish courtiers had started plotting once again. 'But on the other hand, it would be fun to see how dear Birbal gets out of this weird situation,' he thought to himself and said, 'Yes, you are right. I shall order Birbal to go to the

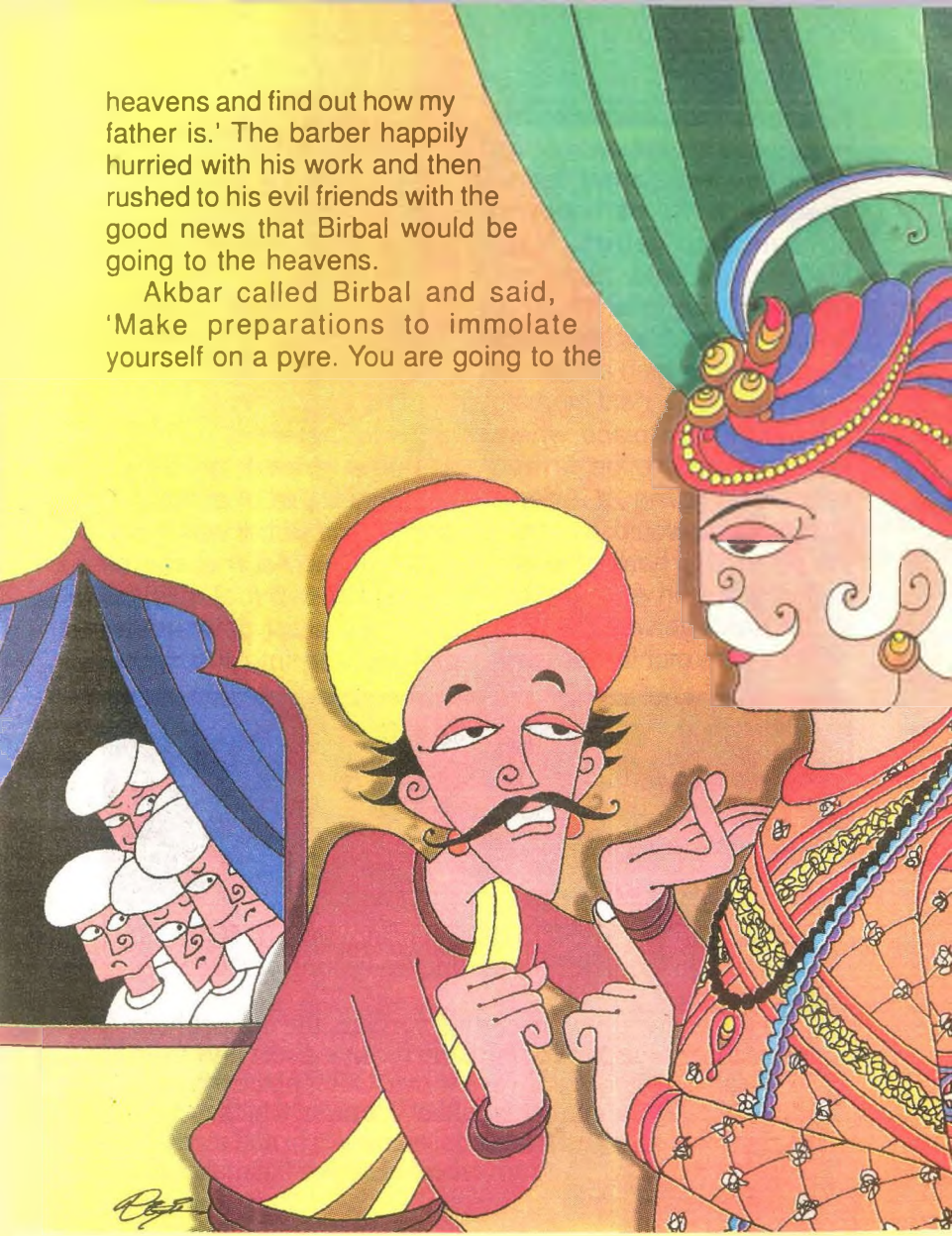
Did You Know?

Dessert chocolate is often taken on expeditions, as it is a high-energy food that takes up little space. The first-factory made slab of dessert chocolate was produced in Switzerland in 1819.



heavens and find out how my father is.' The barber happily hurried with his work and then rushed to his evil friends with the good news that Birbal would be going to the heavens.

Akbar called Birbal and said, 'Make preparations to immolate yourself on a pyre. You are going to the



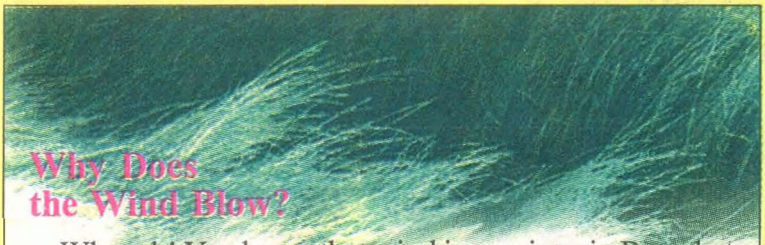
heavens to convey my regards to my father.'

Birbal was rather taken aback. 'I would be happy to call on your father, Your Majesty,' he said. 'But I will need a month's time to prepare myself for the royal visit.' Akbar agreed and Birbal went home. The next morning he went to the place where the pyre was to be lit and started digging a secret passage that would lead from the pyre to his home. He dug and dug day in and day out till the passage was ready.

When the month was over, a huge crowd gathered around the pile of sticks that were lit and Birbal was made to sit on it. As the smoke billowed out, Birbal quiet as a mouse, crept down under the pile and into the secret

DID YOU KNOW?

The country with the most post offices is India with over 152,792 compared with just over 38,000 in the United States.



Why Does the Wind Blow?

Whoosh! You know that wind is moving air. But what causes the air to move? It's the uneven heating of the earth's atmosphere.

As the sun warms the earth's surface, the atmosphere warms too. Some parts of the earth receive direct rays from the sun all year and are always warm. Other places receive indirect rays, so the climate is colder. Warm air, which weighs less than cool air, rises. Then cool air moves in and replaces the rising warm air. This movement of air is what makes the wind blow.

passage through which he crawled to the safety of his own house.

Meanwhile at the immolation site the fire died down and the crowds cleared away. The evil courtiers and the barber rubbed their hands in glee, happy that Birbal was dead and gone. That night under the cover of darkness, Birbal fled to a neighbouring kingdom where he lived in disguise for three months.

One day he announced that he was returning to Akbar's kingdom. News spread like wild fire-that Birbal was returning from the Heavens and everyone gathered at Akbar's palace to see Birbal.

Akbar was happy to see his friend. He greeted him warmly and asked him how he fared. 'Quite well, Your Majesty,' said Birbal. 'Your royal father was very happy to see me. He sends you his blessing. But he has a small problem...'

'What is it?' cried the Emperor.

'There is no barber in heaven. He wants you to send him your royal barber immediately.'

When he heard this, the royal barber nearly swooned. 'Dear Lord,' he cried and fell at Akbar's feet. 'I am sorry, Your Majesty. The courtiers made me do this.'

Akbar sent the evil scheming courtiers and the barber to the dungeons.

Did You Know?

Stalin's left foot had webbed toes and his left arm was noticeably shorter then his right.

DID YOU KNOW?

In ancient Greece, children of wealthy families were dipped in olive oil at birth to keep them hairless throughout their lives.

Feature

- Dhanya Gopinath

Cooking and Eating Utensils Around the World and Down the Ages

Prehistoric man lived in caves and made fire by rubbing stones together. During those times, food used to be directly cooked on the fire. Gradually as time went by, the need to have some thing to hold the food

was, perhaps felt; hence the innovations that followed.

The earliest references to cooking utensils come in the form of pots and pans made from clay. In the book titled, *Classical Greece*, by C. M. Brown, there are colourful pictures of tableware and utensils as early as the 5th century B.C. Here, everything from the drinking mugs, flasks that hold oil and vinegar, the stone grinder kept in a round bowl etc., are all made with clay. The Greeks brought a great feeling of purity, elegance and function into everything they did and this was seen even in their household utensils. Even an ordinary jug used for the purpose of holding wine stands witness to the Greek love of beauty.

In ancient America, the Inca tribes used small clay vessels. The Chinese made use of the metal bronze, in the making of ritual vessels. There are references to bronze utensils between the period 1500-1000 B.C. During the illustrious centuries of the Han Dynasty (206 B.C. to A. D. 220), there are references to the use of brass vessels. Later the Tang Dynasty, ruled over China between A. D. 618-907. This was a period of enlightenment and prosperity, so a high level of

Did You Know?

In the state of Kerala, it was a common practice to use jack fruit leaves for making an improvised spoon. The jack fruit leaf was folded and sealed at one end with a small stick taken from the coconut leaf. This was commonly used as a spoon for drinking the gruel called *kanji*.

Did You Know?

In India, especially in the South, the use of banana leaves was common. To this day the banana leaves are used instead of plates on auspicious occasions.

sophistication was prevalent. During this time, dishes were made of fine porcelain or blown glass. The favourite colours for these wares were the colours of the best jade, white, pale-blue or green. Huge cauldrons were used to cook meat and wine was stored in huge jars. These jars had ring handles on the sides, and were elaborately decorated.

In ancient India also, clay or terra-cotta as it is called these days, seems to have been used by the early people. Later as people tried out new ways of making things, they still kept using clay pots for the purpose of storing water. The simple undecorated pots kept water cool during the summer months. As time progressed, vessels began to be made of metal.

Did You Know?

When preserved food was first packaged in the west, it came with simple instructions, 'Cut around the top outer edge with a chisel and hammer.' Very soon, a new kitchen device, the can opener, was invented.

In the article *Kitchen Ware of a Bygone Era*, by Kamala Ramakrishnan, it is mentioned that various metals were used in India for domestic purposes. Indians have always believed that the various metals and minerals had effects on the body, hence it was naturally felt that food cooked in various metals absorbed certain trace minerals and elements that are beneficial to health. In the kitchens of yesteryear, iron vessels like the *karhai* were used as the metal

from these vessels helped to increase the level of iron absorption. These were the vessels that were used on the fire; besides that there were innumerable others that were used for food preparation. Sieves, graters, spoons, ladles, oil containers and several other containers of almost every form and shape were all important part of a kitchen.

Although the metal gold was also used in the making of household utensils, it by and large remained the prerogative of the princely class. Silver was used by the upper middle class especially for vessels meant for drinking and eating. Copper was limited to water containers and ritualistic objects. Brass which is an alloy of copper and zinc, became the most preferred form of metal in the kitchen. Places in India like Mirzapore, Moradabad, Varanasi, Pune, Ahmedabad and Punjab emerged as centres that made excellent brass utensils. As brass has a great capacity for heat conduction and heat retention, this metal remained a popular choice for a very very long time. Another great property of brass is its malleability. It is possible to make varied shapes that were needed to suit the demands of differing methods of cooking.

Did You Know?

Until the 19th century, kitchens changed very little. The open-fire and a very crude-looking oven were the only cooking devices available. In these open fires, coal had to be carried and the ashes had to be removed. The whole process was labour-intensive.

In the states of Kerala, Bengal and Assam, another metal called the bell metal was used in the making of certain utensils. In Kerala, the bell metal was made of seventy percent copper and thirty percent tin and is best seen in the *varpu* and the *urali*. As the bell metal used to make the *urali* makes it heavy, the urali remains popular to this day for the making of the famous *pal ada* and *pal payasam* (the popular kheer). This is because these heavy utensils make it possible to make these milk-based preparations without the fear of getting a burnt product. Today, besides its practical applications, the *varpu* and the *urali* are both utensils that are prized for their aesthetic design. In addition to being circular and broad-based, with sides curving out perfectly to end in a gentle tip, the graceful handles of the *urali* complete the picture and give it an aesthetic touch.

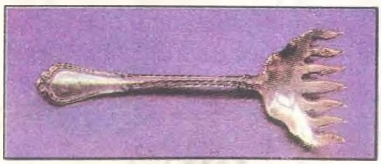
In Bengal, this alloy is called the kansa alloy. This is slightly different from the Kerala bell metal. It is made of seven parts of copper and one part of tin. In Bengal, the design and shape of the kansa utensils formed an independent school of art. Beautifully

Did You Know?

After being petted, sometimes you will see a cat cleaning himself. He is trying to get the "person" smell off.

Did You Know?

During the Victorian era, i.e., during the second half of the 19th century, a lot of specialised cutlery like the tomato servers, sardine forks, jelly knives and cheese scoopers were invented.

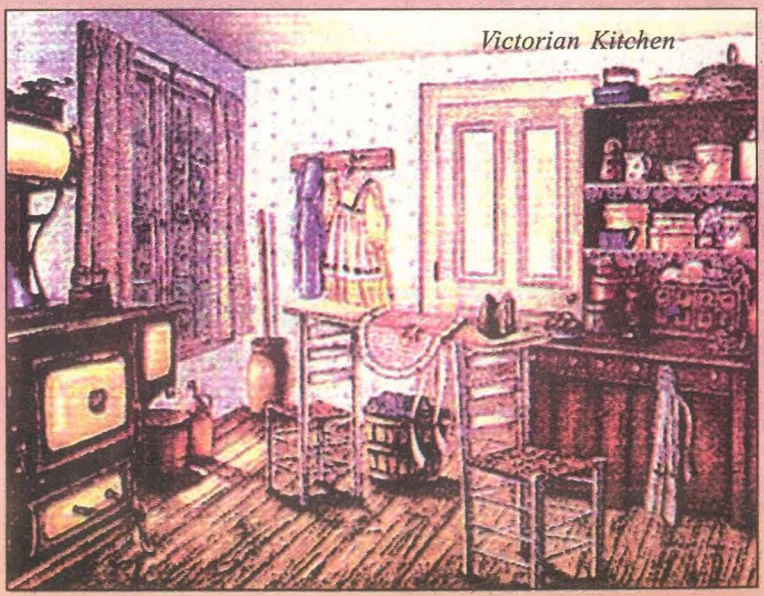


proportioned, the kansa utensils are resistant to tarnish and used to make excellent cooking and serving dishes.

Stoneware was also used for cooking. This was so, especially in Kerala and Tamil Nadu. The kalchatti was an indispensable part of the kitchen. Curries like the vatha kuzambhu and the tasty aromatic pulikachal tasted best when prepared in a kalchatti.

Cooking utensils around the world had a distinctive style and remained so for a very long time. In the west, things started changing slowly after the Industrial Revolution. This happened in the 19th century and resulted in what is generally called the Victorian Culture. This culture may have started in the British empire but it gradually became a social phenomenon that spread throughout Europe and North America.

The new British social customs were imitated all over the world. Popularly



Victorian Kitchen

known as the Victorian Kitchen Technology, it brought many changes to the lives of the people and this began to bring changes not only in what people ate, it also affected how they preserved and prepared food, leading to new cuisines and social concepts. As the British empire was actively involved in the spice trade, traditional British culinary habits changed. The usage of spice boxes became standard items in most kitchens.

Charles V of France

Though canning was first developed as early as the 18th century, it was during the Victorian era that food preservation techniques such as salting, pickling, drying and smoking reached a high level of perfection.

As for crockery, it is widely believed that Charles V of France is credited with the invention of the item called the plate. Although first produced as early as the 1750's, the technique called the blue and white pottery did not reach its peak, both in production and popularity until the early to the mid-nineteenth centuries. The blue and white pottery refers to the process of printing designs on paper and then transferring them directly to porcelain and pottery.

By the end of the 18th century, the Staffordshire potters developed a reliable

Did You Know?

Carl Austin Rietz, an American inventor and businessman, assembled the Rietz Food Technology Collection in the California Academy of Sciences, U.S.A. This gentleman's life-long interest related to the study of food. He has documented cultural traditions from around the world that relate to the production, processing, storage, preservation, preparing and serving of food.

method, which became the hallmark of the British empire. The ceramic industry expanded, designs were copied from expensive Chinese wares, and later potters copied designs from illustrated books. Some of the illustrations were done by the finest of artists. Ceramic pottery thus reached incredible heights.

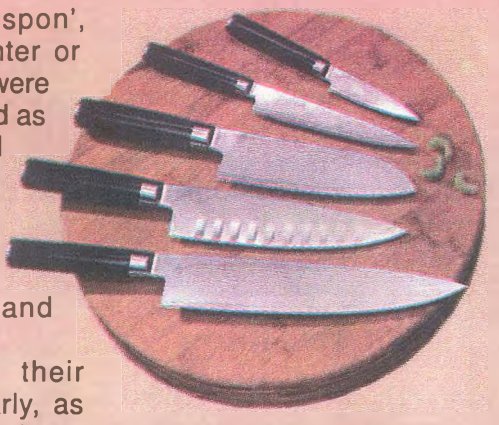
If the history of cooking vessels is interesting, the history of cutlery is even more so. The spoons, forks, and knives that we are so familiar with today, are the result of years of experimentation.

During prehistoric times, people used naturally occurring sharp pieces of stone for shaping and cutting foods. When enough sharp flints were not available, people began to fashion their own cutting tools by chipping stones into a proper shape. Later as people felt the need for a longer reach, especially when handling hot liquids, they began thinking of other implements. In coastal areas, where there was an abundance of shells, people started using shells fastened to sticks. In some places, the hollow horns of sheep and goats were also used. All this slowly led to the development of the spoon. The very word spoon originated from the

Did You Know?

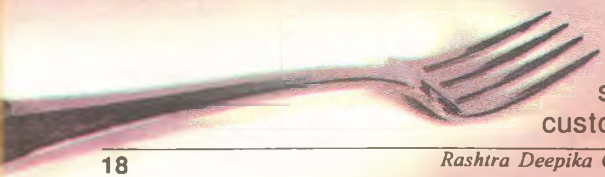
The invention of Teflon Coating has been another landmark achievement. When utensils are given a teflon coating they get a nonstick quality that gives them the unique property of being easily cleaned, a great boon to the busy housewife. Nowadays it is not uncommon to look for teflon coating while buying cooking utensils whether they are pots, pans, or bake-ware.

Anglo-Saxon word 'spon', which means a splinter or chip of wood. Spoons were later carved from wood as well as from bone, shell and stone. During the Middle Ages, highly decorative spoons began to be made out of rare stones and metals.



Knives made their appearance quite early, as the need for cutting food was felt. In England, during the Anglo-Saxon times, knives had a very important role to play. It was an all-purpose tool for its owner. He was never without it for not only was it used to cut meat and vegetables, it also began to be used for self-defence; besides it could also be used on the table as a table knife. Knives of those days used to be made of bronze or iron and were sharp and pointed. When used as a table knife, food was cut with the sharp edge and conveyed to the mouth at the tip of it.

Forks seemed to have originated in Italy. When Catherine de Medici of Italy married Henry V of France, she brought a fork with her to France. For eating soup, Germans are known to have used spoons; the Italians used a fork to eat the solid ingredients found in soup and drank the remaining liquid out of the bowl. During those times, the Germans and Italians used to provide one knife for each person at a table, whereas the French would provide only two or three communal knives for the whole table. This shows how different customs evolved in the



different European countries.

During the 17th century forks became common implements at the table. Since they could be used for holding food steady, while cutting and carrying food to the mouth, gradually the knives that were used at the dining table began to be blunt at one end. In the United States of America, forks became popular only during the early nineteenth century.

Another important item of cutlery is the chopstick. Developed in China, some 5000 years back, it gradually spread from China to present-day Vietnam, Korea and Japan. Chopsticks could have come about because the Yellow Race cooked their food in large pots that retained heat well, and hence needed some implement to retrieve the food. Initially they broke twigs from trees to retrieve food but found it impossible as the food was chopped up into small pieces from a variety of materials. Bamboo was the most popular material but cedar, sandalwood, teak, pine and bone have all been used to make chopsticks. The wealthy had chopsticks made from jade, gold, bronze, brass, agate, corals, ivory and silver.

The twentieth century has brought about a lot of changes in almost every aspect of our lives. By about the year 1920, stainless steel was invented. This was one of the greatest inventions of the time, as it provided an inexpensive, easy-to-maintain and non-reactive

Did You Know?

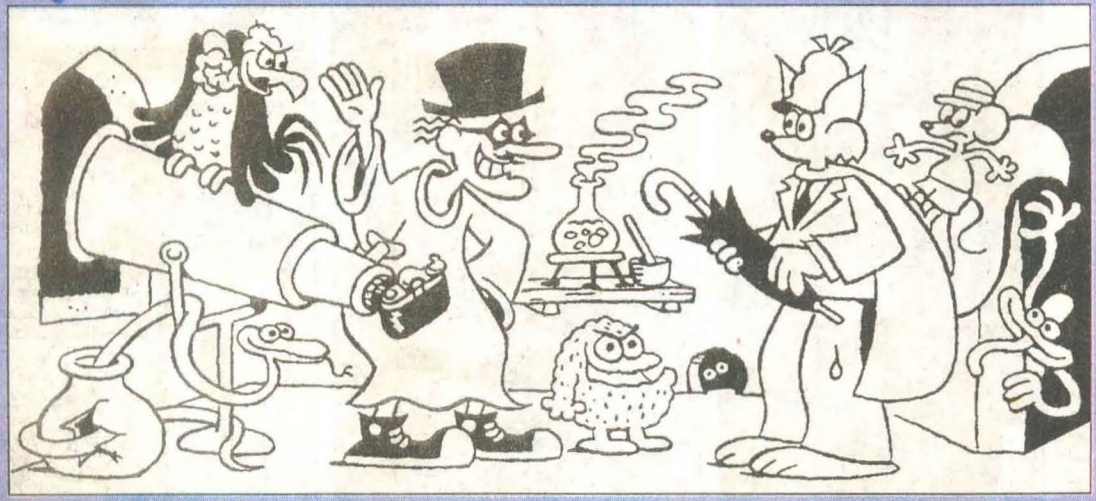
The wooden butter churner was a very common sight some fifteen to twenty years back. Those days kitchen-activity was a very leisurely affair. The housewife used to spend a lot of time every week churning butter with her own hands by using the rope provided with the churner. Nowadays the wooden butter churner has become obsolete as there are electric mixies that are labour-saving and quick.

Did You Know?

The Madras Institute of Catering and Hotel Management, Chennai has a museum of artifacts from all over India. The objects in the museum make interesting viewing as it has taken care to replicate grandma's kitchen of bronze, copper and iron utensils plus the wood and coal stoves. One section is full of the lotas and vessels used during travel. Next there are the various spoons and ladles on display. Not to be missed are a pair of tongs. There are traditional tumblers of bronze and copper from all over India. Also on view are the numerous saucepans that were used not so long ago.

soft metal for making anything from the cooking to the eating utensils. Gone are the days when coffee used to be served in silver tumblers, *mist dahi* (a Bengali delicacy) served in matka pots and vathaa kuzambu cooked in kalchattis; we have now moved on to a maintenance-free, hassle-free kitchen and a style of cooking complete with all the gadgets like the pressure cooker, refrigerator, electric grinder, microwave, and so on. Most of the vessels used in the past in our traditional kitchens, would have either been consigned to the smelting pot or have become decorative items in aesthetically done-up interiors.

Try It...



Which piece on the right is slightly different from the above scene?

(See page 97)

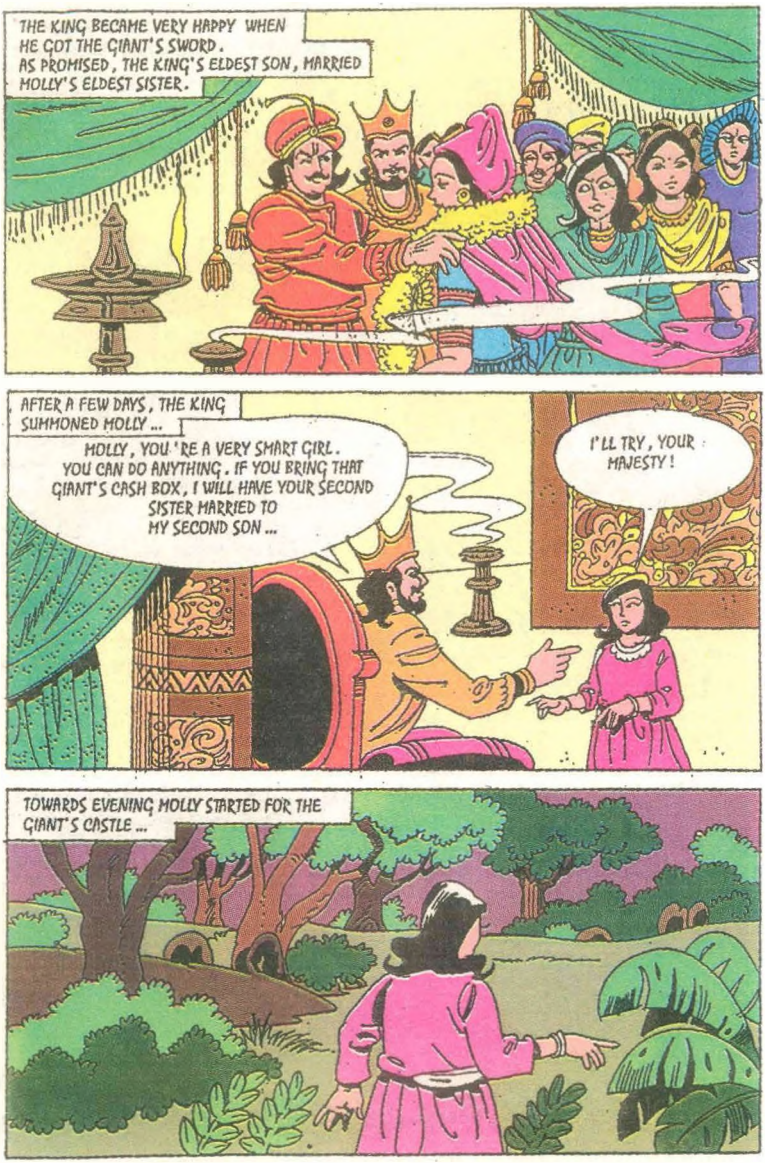
MOLLY FOOLS THE GIANT-2

HAVING ESCAPED FROM THE GIANTS' CASTLE, THE GIRLS RAN FAST THROUGH THE FOREST...
TOWARDS DAWN THEY REACHED A PALACE.
THE GIRLS WENT IN AND TOLD THE KING EVERYTHING...
THUS WE FOOLED THE GIANT AND ESCAPED.
HA.... HA! SMART KIDS.

HOLLY IS QUITE SMART. CAN YOU DO A HELP FOR ME ?
YOU SHOULD BRING ME THE GOLDEN SWORD OF THAT GIANT .
IF SO , I'LL CHOOSE ONE OF YOU AS THE WIFE OF MY ELDEST SON .
THAT NIGHT , HOLLY ENTERED THE CASTLE OF THE GIANT ...
NOISELESSLY HOLLY TOOK THE GOLDEN SWORD ...
GOT IT !
BUT ... AS SHE REACHED THE DOOR ... MY GOD ! ....
KTIN !

HEARING THE SOUND, THE GIANT WOKE UP
EH! WHO'S THAT?
AS HE SAW MOLLY, THE GIANT LAUGHED.
HA-HA-HA! YOU'RE TRYING TO STEAL MY SWORD EH?
STOP THERE!
MOLLY RAN FAST...
I WON'T LET YOU GO WITH MY SWORD!
OH! GOD!

MOLLY AND THE GIANT REACHED A BRIDGE WOVEN BY THE GIANT'S HAIR...
GOT YOU GIRL!
BUT, BEFORE THE GIANT COULD CATCH HIM, MOLLY STEPPED ON THE BRIDGE...
OH! ESCAPED!
..... AND REACHED THE OPPOSITE BANK.
HMM!... IF I STEP ON THIS BRIDGE IT WILL BREAK AND I'LL FALL DOWN...


THE KING BECAME VERY HAPPY WHEN HE GOT THE GIANT'S SWORD. AS PROMISED, THE KING'S ELDEST SON, MARRIED MOLLY'S ELDEST SISTER.
AFTER A FEW DAYS, THE KING SUMMONED MOLLY ...
MOLLY, YOU'RE A VERY SMART GIRL. YOU CAN DO ANYTHING. IF YOU BRING THAT GIANT'S CASH BOX, I WILL HAVE YOUR SECOND SISTER MARRIED TO MY SECOND SON ...
I'LL TRY, YOUR MAJESTY!
TOWARDS EVENING MOLLY STARTED FOR THE GIANT'S CASTLE ...

DURING NIGHT, MOLLY GOT INTO THE GIANT'S CASTLE.
WHERE MAY BE THAT MAGIC CASH BOX?
HURRAH!... THIS MAY BE...
IS IT CASH BOX? LET ME SEE...
MOLLY OPENED THE BOX. SUDDENLY A COIN FELL DOWN ON THE FLOOR.
NHIM!
NHIM!
NHIM! NHIM!...
HEARING THE JINGLING SOUND OF THE COIN, THE GIANT WOKE UP...
HMM! YOU? YOU CAME AGAIN?
GOD! HE SAW ME!
(To be continued)

Pet confusion

It is vacation time and four families (friends and neighbours) – the Guptas, Sharmas, Vermas and Chopras – are planning to beat the heat and grime of the city by taking a week-long holiday at a hill station. But their problem is – who will take care of their beloved pets, Raja, Rani, Chikki and Micky, while they are away? Finally, the problem is solved. Kantabai, who works as a domestic help in one of the houses, is entrusted with the job of visiting each house twice daily to feed each pet in their absence. She prepares a schedule of stops for each day to cover the four different pets she needed to take care of that week. Now, your task is to determine which family owned which animal, the pet's name, and the order in which each was fed. The following clues are given to help you.

1. The Guptas didn't leave Raja. The parrot was visited last.
2. The first pet fed wasn't the horse, but the horse was fed just before Chikki.
3. The Sharma family was the first stop, but a cat wasn't fed there. The Verma family's pet is not Rani.
4. The dog wasn't called Raja. The cat's name was Rani.
5. The last pet visited was not Raja.
6. The Chopras didn't own a horse, but their pet was the second one to be fed. Chikki is the name of the parrot.

Solution

Owners	Animal	Name	Order
Sharma	Dog	Micky	First
Chopra	Cat	Rani	Second
Verma	Horse	Raja	Third
Gupta	Parrot	Chikki	Fourth

FATEHPUR SIKRI

Fatehpur Sikri, near Agra in Uttar Pradesh, is a town built by Emperor Akbar. It was the capital of the Mughal dynasty between 1570 and 1586. The town was named Fatehpur or the Place of Victory, to commemorate Akbar's conquest of Gujarat. Fatehpur Sikri is an architectural marvel. The many monuments here are a unique blend of Islamic and Hindu styles. All the monuments have been built in red sandstone.

Diwan-i-khas or the Hall of Private Audience is one of the most prominent buildings of Fatehpur Sikri. A two-storeyed building, it has a single vaulted chamber with a decorated corner kiosk. The hall is famous for the centre pillar that has 36 carved and decorated brackets. This centrepiece supports a circular platform, from which four narrow stone galleries extend. These connect to the pillars at the corners of the hall.

Jami Masjid is one of the largest mosques in India. There is a vast congregational area inside. It is also one of the most ornamentally finished mosques in the world. The tomb of Sheikh Salim Chisti is also here. The entrance to the mosque is through the Buland Darwaza or the triumphal gateway. The gateway is designed in coloured stone and marble.

The other monuments in Fatehpur Sikri are the palaces of Jodha Bai and Birbal, the Diwan-i-am, the Panch Mahal, the Anup Talao, and the Sunehra Makan.

-P. G.

RADIATION RISKS

A report published by the U. S. Department of Health and Human Services on January 31, 2005 lists X-rays, gamma rays and neutrons as carcinogens (cancer-causing agents). The report says that "x-rays and gamma-radiations are most strongly associated with leukaemia and cancer of the thyroid, breast and lungs." It adds that the risk to some extent depends on the age of the person at the time of exposure, with childhood exposure mainly responsible for increased leukaemia and thyroid cancer risks. But the American College of Radiology (ACR) has criticised the report as causing undue alarm, which might make patients who desperately need x-ray examination believe they are being placed under serious risk while undergoing a medical x-ray check.

Tea in a Pill

Scientists at the Tocklai Research Centre in Assam have produced a tea pill which you can simply pop into your mouth, saving you the trouble of brewing a cup of tea! This pill can be chewed or in case you want your usual cup, can be dissolved in hot or cold water. The brownish tablet contains 80% tea and 20% other flavours, and weighs 0.3 gms. Mrinal Hazarika, the

Did You Know?

Electric light or light from your TV set will make your cat shed her fur.

Centre's director, assures us that the tea pills are as good as liquid tea.

A New Variety of Tender Coconut

Scientists at the Central Plantation Crops Research Institute (CPCRI), Kasargod, Kerala have found that an orange coloured dwarf variety of coconut produces sweeter coconut water. With the increasing demand for coconut water as a summer drink, coconut cultivation exclusively for this purpose is catching on. This variety can become popular as it is a dwarf tree and takes only a few years to mature. It is ideal for small farmers and the home gardens in cities.

Ozone Layer has Thinned Down over the Arctic

Protective ozone layer over the Arctic has thinned this winter to the lowest level since it began to be recorded, report Cambridge University scientists. This thinning of the ozone cover allows harmful ultraviolet light to reach the earth's surface making children and outdoor enthusiasts such as skiers and surfers more vulnerable to skin cancer. So, the scientists say, people going out in the sun this summer should protect themselves with creams and hats. They say that at high altitudes, 50 percent of the protective layer has been destroyed, and in late March, Arctic air masses drifted over Britain and the rest of Europe as far south as Northern Italy, giving significantly high doses of u.v. radiation and sunburn risk.

Polar clouds are forming more often over the arctic, and causing more ozone to be destroyed.

Words in the right place

Tracing word origins is an intellectual exercise. Places often lend their names to objects or ideas associated with them. *Jeans*, for example, derives from Genoa, and *spaniel* from Spain.

We know that the word *argosy* means a large merchant ship, but how many of us do know that it comes from the Italian *nave Raagusea*, a ship of a port called *Ragusa*? This port is now Dubrovnik in Yugoslavia.

In the Middle English period, there was an asylum in London for the mentally impaired. It was the hospital of St.Mary of Bethlehem; the 13th century people called it Bedlem.Over the years, an uproar or noisy confusion meant *bedlam*.

Maker or seller of women's hats is a *milliner*. In the 16th century, women's finery were imported from Italy and a person who designed, made, trimmed and sold women's hats flourished in Milan. Hence *Milaner,* a seller of clothing and other goods, was named after the fashion capital of Italy.

Persons who became words

Louis Antoine De Bougainville

Louis Antoine de Bougainville (1729-1811), French soldier, navigator, mathematician and statesman, was one of the most interesting characters of the post-Renaissance period. Born in Paris as the son of a notary, he studied law but abandoned the profession to join the army, and distinguished himself in the Seven Years War. He wrote a treatise on integral calculus, which led to his election to the Royal Society of London in 1756. In 1763 he left the army and joined the navy. In 1766 he embarked on a two year long voyage that made him the first Frenchman to sail around the world. He received much acclaim after his return. His name is given to the largest member of the Solomon Islands; and to the strait which divides it from the island of Choiseul. It is also applied to the strait between Mallicollo and Espiritu Santo islands of the New Hebrides group. The South American climbing plant with brightly coloured papery bracts, discovered on his voyage, is named *bougainvillea* after him.

Quiz of the Month

- Prof. N.G.J.

1. During the period of World War I, three European kings, George V of England, Kaiser Wilhelm II of Germany and Tsar Nicholas II of Russia were all grandsons of a Queen. Name her.
2. What is the colour of the largest whale?
3. Which literary character rode on his horse Rosinante?
4. What was the original name of Olympias, the mother of Alexander the Great?
5. What is the name of the burial site of the Egyptian Kings excavated recently at Luxor?
6. Who wrote the autobiography "Unfinished Journey," which was later modified as "Unfinished Journey, Twenty Years Later" by adding four more chapters?
7. Out of the four Vedas which one is the oldest?
8. Who is the world's longest ruling head of government at present?
9. In which state is Kangerghet National Park?
10. How is 'Queensland and Northern Territory Aerial Service' better known as?
11. What is the name of the disease caused by the presence of an extra chromosome in the 'Chromosome 21' pair?
12. What event was celebrated in the Delhi Durbar of 1903?
13. Identify the artist whose self-portrait is shown. Mention some of his famous works.

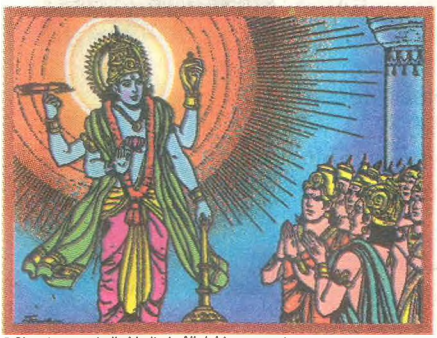
(See page 97)

STORY OF INDIA

THE MIGHTY AND THE DWARF - I

Mahabali, the grandson of Prahlad, was a great demon hero. He conquered the entire earth and earned renown as the mightiest king ever known. But even this could not satisfy his ambition.

He turned his attention to heaven. The gods were no match for him in power or valour, and he easily defeated them. They were faced with two unpleasant options – either leave heaven, or live as Mahabali's subjects!



The gods went to Vishnu, told him all about their plight and pleaded with him for help. Vishnu knew that although Mahabali was proud of his power, he was virtuous and kind. He could not be vanquished like any ordinary demon.

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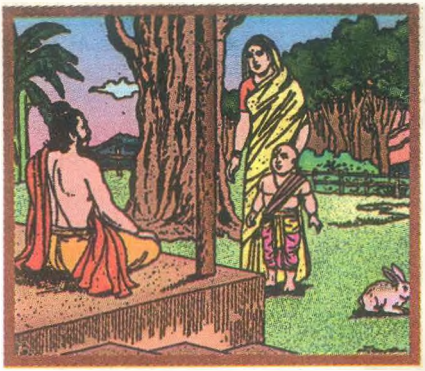
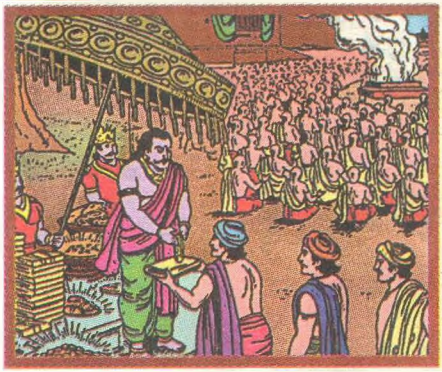


Vishnu took birth as the son of the sage Kashyapa and his wife Aditi. He was named Vamana. As he grew up, he was observed to be a dwarf. However, no one could equal him in intelligence. He studied the scriptures and soon won fame as a great scholar.

King Mahabali performed a great *yajna*. Hundreds of priests officiated at the function. The king started giving away gifts to his subjects to mark the occasion. He announced that anyone could ask him for anything, and he would grant it.



Towards evening, the *yajna* was coming to an end. The guests had dispersed, satisfied. Then Vamana approached the king. "Welcome, young man," said Mahabali. "Tell me what you want. Whatever it is, you shall get it!" "If you really mean it, you must make a solemn promise, pouring the sacred water onto my palm, that you will grant my wish!" demanded Vamana.

(To be continued)

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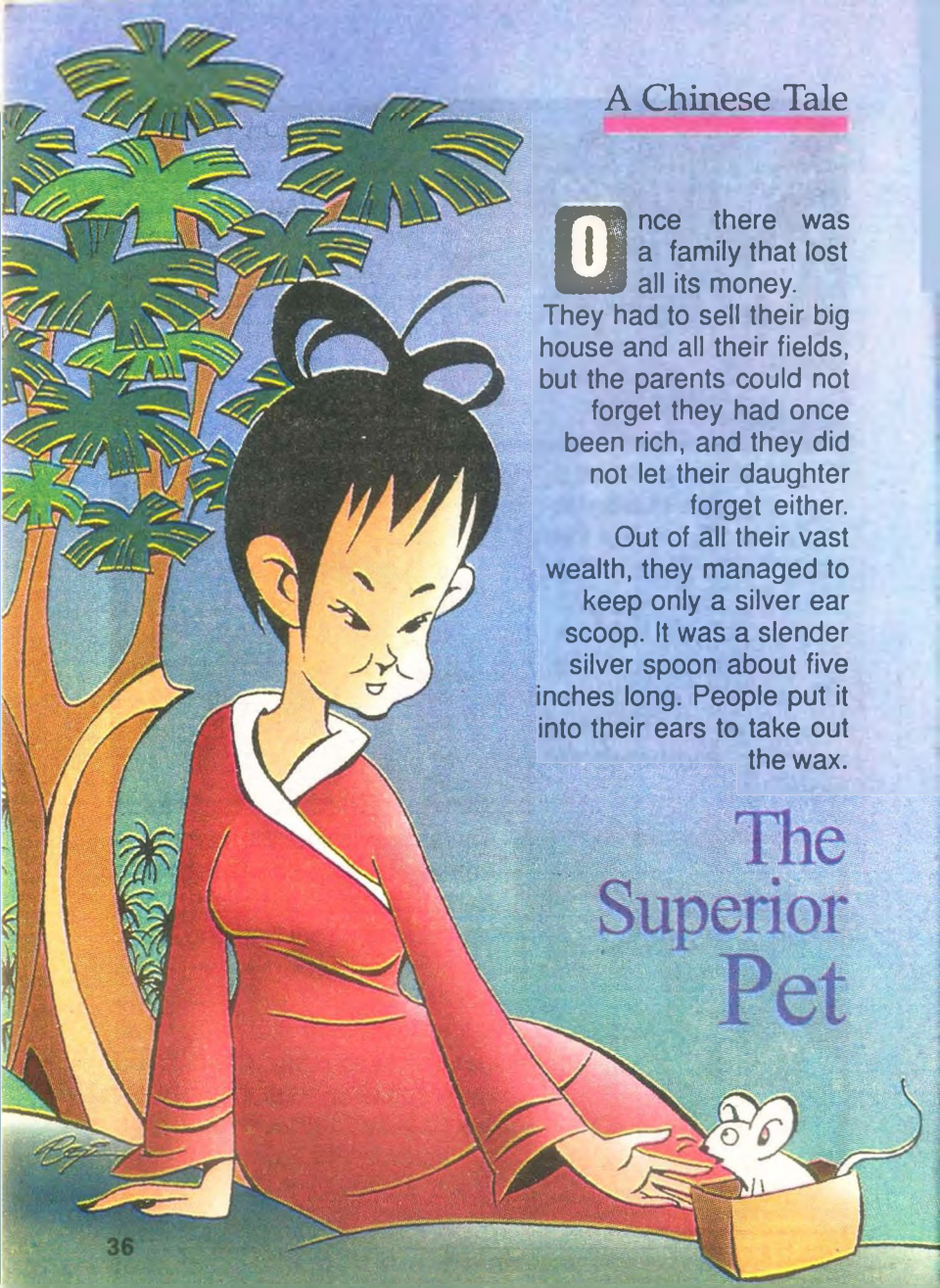


The Superior Pet

Once there was a family that lost all its money. They had to sell their big house and all their fields, but the parents could not forget they had once been rich, and they did not let their daughter forget either.

Out of all their vast wealth, they managed to keep only a silver ear scoop. It was a slender silver spoon about five inches long. People put it into their ears to take out the wax.

"It's a silly enough thing," her father used to say, "but from it we'll rebuild the family fortune somehow."

When the daughter grew old enough to marry, no rich family wanted her with only an ear scoop for a dowry, and her parents thought poor farmers were beneath her.

When her parents died, no one wanted her. She lived with other unmarried women in a house that the clan provided, but it was very crowded. She lived there many years.

Although she sewed from sunrise to sunset, she was still very poor. As she got older, her eyes got worse. Soon, she could not sew the fine stitches she once had. As a result, even though she worked just as hard as before, she got less money. Eventually, she could no longer pay her share of the food and other costs.

"Why don't you sell that old ear scoop?" the other women would ask her.

"It's all I have from my parents," the old woman said indignantly.

Because she had been in the house so long, she had a nice spot in a corner, but the other women wanted her to move to another place.

"You can't pay your share and yet you take up all that space," the other women complained. They found dozens of little ways to be unpleasant. Among other things, she always had to be last — even to use the wash water. They would give her only the stringiest vegetables

Did You Know?

Mayflies live for a year or more as larvae; but as adults they live for only a few hours.

Mayfly larva

Did You Know?

If a normal mouse is forced to overeat, it becomes obese. When the force feeding stops, the mouse won't eat as much as normal until it loses the excess weight it gained.

and the weakest tea. And they always served her rice scraped from the bottom, which was hard and crunchy and difficult for the old woman's teeth to chew.

One day, a younger cousin caught a mouse. But in catching it, she had injured one of its feet. "Look at this thing. It's all white."

"That proves it must be a superior mouse," the old woman said. "There's not another like it in the district."

"The pest is probably a superior eater too," her cousin said. "I'm not going to have it nibbling at our food and clothes."

But the mouse looked so small and fragile and helpless that the old woman knew it needed her. She had never had anyone to love, and, as such things go, her heart fixed on the mouse. A superior mouse will make a superior pet, she thought to herself. And out loud she said, "Give it to me. I'll get rid of it."

Her cousin was glad to give the unpleasant task to the old woman. "Here then."

Moth and Butterfly

Butterflies are active during the day, moths at night. As a result, they have different lifestyles and adaptations.

Butterflies close their wings when they rest; moths open them. A butterfly antenna is knobbed or club-shaped; moths' are of various shapes (not usually clubbed). A butterfly's body is long, slender, not hairy; a moth's is short, stout, and usually hairy. Moths can be destructive.

DID YOU KNOW?

Certain Chinese and American alligators can survive the winter by freezing their heads in ice, leaving their nose out to breathe, for months on end.

But the old woman did not kill the mouse. Instead, she kept it in a little box. She made a soft nest for it out of scraps of cloth. She even went hungry so she could save some of her rice for her superior pet. In time, the mouse's foot healed.

One day, though, her cousin found the mouse. "You old liar. You kept that filthy little thing."

She was going to throw the box down the well, but the old woman grabbed it from her. "This is mine. It's a superior mouse."

"You've gone too far this time. Beggars can't act like empresses," her cousin said. She called all the other women around her. Naturally, they took the cousin's side.

The old woman clutched the box to her and looked at the circle of hard, stern faces. She saw no mercy there. "I'll go," she said in a small voice.

Her cousin was surprised. "You've never been away from the village in your life."

"Then I'll learn." The old woman packed her few belongings quickly — including the ear scoop. Then she left the house where she had lived all those years. I should be afraid, she thought to herself, but I feel years younger. She gave a little skip as she walked away from her village and up into the hills.

She looked for roots and plants for

Did You Know?

Microsoft threatened 17 year old Mike Rowe with a lawsuit after the young man launched a website named MikeRoweSoft.com.

Mike Rowe

Did You Know?

Mice, whales, elephants, giraffes and man all have seven neck vertebrae.

herself and her mouse. But it was autumn, and the villagers had already stripped the hills bare looking for fuel.

It was cold that night, and the old woman kept the box against her stomach to keep her pet warm. The next day she wandered even farther. But she still found nothing to eat.

Did You Know?

A fresh egg will sink in water, but a stale one won't.

Finally, she came to a wall that paralleled the road. Beyond the wall lay only a few old moss-covered stones and bushes.

Her feet ached with the cold and exertion, so she sat down with her back against the wall. On her lap she set out the box with her superior mouse. Then she opened the lid so it could breathe. Then she took out the silver ear scoop and held it in front of her pet. "We'll have to sell this. But the money won't last forever. And then what will we do?"

But the ear scoop dropped from her nervous fingers and felt into the weeds.

Try It... Find six differences between these two panels.

(See page 97)

"Now I'll have to clean it." As she bent to get it, the white mouse leaped from her lap and onto the ground. Snatching up the spoon between its teeth, the mouse scurried to the wall. Desperately the old woman tried to grab the mouse, but it vanished through a crack in the wall.

"You ungrateful little thief," the old woman said. "I gave up everything for you. Is this how you repay me?" Anger made her forget that she was cold and tired.

She dug and tore at the crumbling old bricks, and when her fingers began to bleed, she picked up a sharp stick instead and began to pry them out. She pulled brick after brick away from the wall, and still there was no sign of the furry bandit.

When she lifted the final brick from the spot, the last of the sunlight winked off something. Hardly daring to breathe, she dug into the dirt itself. There, buried in the earth was a large golden vase. She scrabbled even deeper and found more objects of gold and silver. And beneath them was a pile of emeralds and rubies and pearls. And right in the middle of the pile of jewels was her silver ear scoop.

The superior mouse had repaid her kindness before it had gone on its way. And in certain parts of China, the farm folk still think that white mice bring good luck.

●

Did You Know?

Cockroaches can go without eating for three months, as long as they have water.

Did You Know?

The *sci-fi flick Gog* (1954), in which a nuclear "brain" takes over a secret laboratory, was the first film to have a computer appear as a main character in a movie.

- *Prof. George John Nidhiry*

Pope John Paul II - A Homage

Cardinal Karol Wojtyla of Cracow was elected Bishop of Rome and 263rd, successor of St. Peter, as Supreme Pastor of the Universal Catholic Church on October 16, 1978.

He chose the name John Paul II, in honour of his predecessor John Paul I as well as Popes John XXIII and Paul VI. He was invested with the Pallium, the symbol of his office on October 22 in St. Peter's Square. His predecessor was in office only for 33 days, but he reigned over the Church for more than 26 years. His uncommonly active pontificate came to an end on April 2, 2005. He was the first non-Italian Pope since Adrian VI (1522-23) and the first Polish Pope ever.

Journey to the Holy Land

John Paul II was called "the Pilgrim Pope," because of his various Papal trips. The most striking one was his visit to the

Holy Land in March 2000. He visited the Western Wall and left on the wall a written petition addressing the 'God of our Fathers.'

He prayed in the name of the whole Church: "We are deeply saddened by the behaviour of those who in the course of history have caused these children of yours to suffer and asking your forgiveness, we wish to commit ourselves to genuine brotherhood with the People of the Covenant."

Visit to Poland

Those who study the complex event of the fall of Communism in Eastern Europe give the main credit to Pope John Paul II. His visits to his Polish homeland in 1979 and 1983 enlivened Polish Catholicism and rekindled Polish resistance to Communism. His firm support for the Solidarity Movement led to the emergence of Democracy in Poland. Then followed the unification of Germany and the disintegration of Communist Russia. John Paul II made six more visits to Poland. To commemorate these visits Poland and the Vatican jointly issued two souvenir sheets each in 2004.

Story

My Magic Toy

When I was a small child, on my fifth birth day, my father presented me with an interesting and intelligent toy. It could grow up to my size or make me as small as his size. My father designed it in his laboratory. Thinking that the circuit diagram or the formula of the toy would be stolen or lost, he kept the circuit diagram and formula inside it. It could turn invisible.

I used to play with it happily. No member of my family

except my father knew about this secret. Many days passed. One day, my mother saw my toy and threw it in the dustbin thinking that I didn't need it any more. The sweeper took the garbage with her. When I couldn't find the toy, I asked my mother,

"Mom! Where is my toy?"

She replied, "Oh! I have thrown it in the dustbin as I have never seen you playing with it and the sweeper has taken it away."

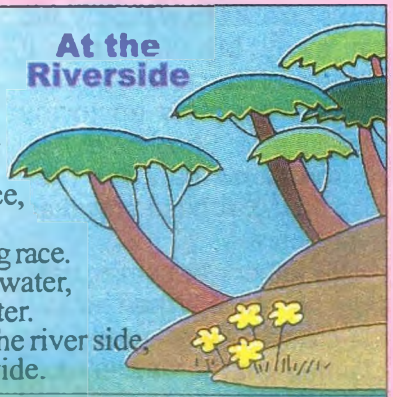
I asked her where the garbage was thrown. She said that it was thrown at a corner of the colony. I rushed there. I searched for it everywhere in the garbage. My hands became dirty. But I couldn't find it. My heart broke. It was a sad moment for me.

If I Were a Bird

If I were a bird
I would fly in the sky
I would eat nuts
And live in a nest
With my beautiful wings
I could see
heavenly bodies.

- Kunal Handa

At the Riverside



At the riverside,
The blossoms open wide.
To see them I had to peep,
While playing hide and seek.
The water splashed
on my face,
When my friends had a
swimming race.
They pulled me down in the water,
In the midst of our loud chatter.
Just like this, we played by the river side,
Where the blossoms open wide.

- Jahnawi Marathe, Std V A,
Atomic Energy Central School, Indore - 452013.

Young Talents

Riddles

1. Why was the magician selected to the cricket team as a bowler?
2. Which invention helps save electricity?
3. Which queen owns a sweet factory?
4. What is the wood that a woodpecker cannot peck?
5. Which balance keeps you steady?
6. Why did the commentator run around the football ground?
7. Which chocolate contains air?
8. What attack is nonviolent?

(See page 97)

Sent by: ***Ajithkumar T. T.****, Govt. H. S. Keezharoor, Keezharoor P. O., Neyyattinkara, Trivandrum, Kerala.*

One of my friends, Akshat saw a stray dog playing with a toy. The toy grew to the dog's size. It threw the toy and ran away. My friend took it home and started playing with it. The toy grew up to my friend's size. Shocked at this, he ran to his parents. They also saw it. A huge crowd arrived there.

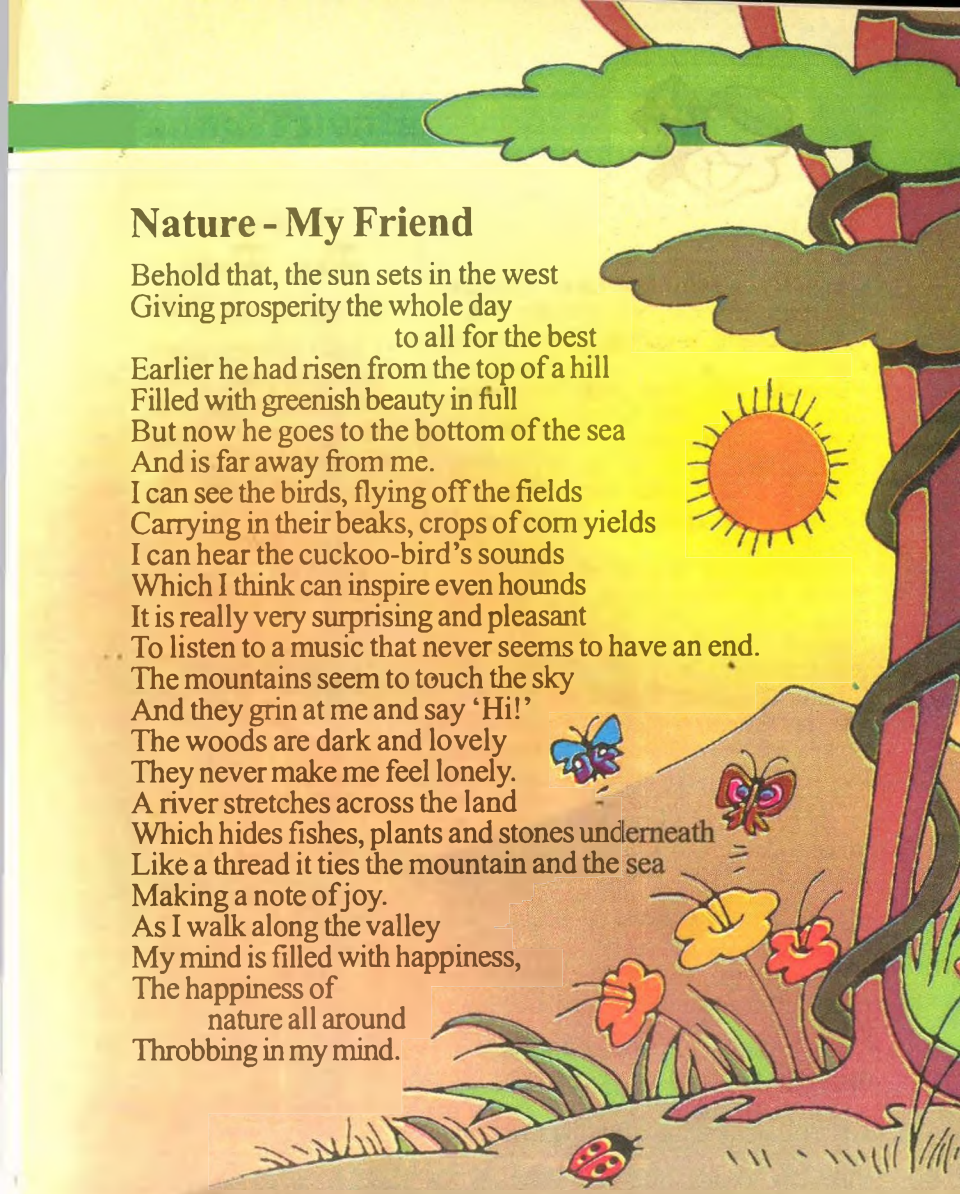
My father was coming back from his office. When he saw the crowd he went near it. He claimed that it was my toy. They told him to prove it. He turned it invisible. But unfortunately couldn't recall how to turn it to its original size. He told me of the incident when he arrived home.

Till today I haven't found it. Whoever brings the toy to me will be rewarded. My father has promised to make one for him who brings it. I haven't tried with a microscope as I don't have one. Do try with a microscope and if found please phone me at 2487149. My father now remembers how to bring it back to its size.

*- **Siddharth Pattnaik**, Std V A, Atomic Energy Central School, B-34/3, CAT Colony, Indore - 452013.*

Nature - My Friend

Behold that, the sun sets in the west
Giving prosperity the whole day
to all for the best
Earlier he had risen from the top of a hill
Filled with greenish beauty in full
But now he goes to the bottom of the sea
And is far away from me.
I can see the birds, flying off the fields
Carrying in their beaks, crops of corn yields
I can hear the cuckoo-bird's sounds
Which I think can inspire even hounds
It is really very surprising and pleasant
To listen to a music that never seems to have an end.
The mountains seem to touch the sky
And they grin at me and say 'Hi!'
The woods are dark and lovely
They never make me feel lonely.
A river stretches across the land
Which hides fishes, plants and stones underneath
Like a thread it ties the mountain and the sea
Making a note of joy.
As I walk along the valley
My mind is filled with happiness,
The happiness of
nature all around
Throbbing in my mind.



*- **Mohammed Iqbal R**, S/o R. M. Ebrahim,*
Iqshad Mahal, P. O. Veluthur, Thrissur - 680016, Kerala.

Pen Pals

1. Hrishi O. A.(10), MH-18-B, Railway Quarters, Mangalore - 575001. H&I: Playing chess, watching TV and reading.
2. Purbachal(19), 7 Man Singh Road, New Delhi - 110011. H&I: Reading, listening to music and travelling.
3. K. Suvarna Raju(14), H. No. 721, Loyola Public School, Loyola Nagar, Guntur - 522005. H&I: Reading, chatting and playing cricket.
4. P. Sai Hemanth Kumar(14), Std IX, Sri Satya Sai Gurukulam, Gurukulam Road, Rajahmundry - 533101. Andhra Pradesh. H&I: Reading, playing volleyball and friendship.
5. Arshia Chavi(11), C/o Justice M. R. Verma, Swatika Niwas, Kasumpii, Shimla - 9. H&I: Dancing, reading and painting.
6. Anil Mahla, Std VIII, Badal House, Sainik School, Chittorgarh, Rajasthan - 312001. H&I: Reading and playing cricket.
7. Arvind Jurel, Std VIII, Pratap House, Sainik School, Chittorgarh, Rajasthan - 312001. H&I: Playing football.
8. Jitendra Singh, Std VIII, Badal House, Sainik School, Chittorgarh, Rajasthan - 312001. H&I: Reading, playing computer games and friendship.
9. V. Monica Lakshmi(13), No. 5/11, Surathamman Koil, Second Street, New Perungalathur, Chennai - 600063. H&I: Reading, painting and friendship.
10. Rahul Menon(14), 18/43 'Vrindavan', Kunnathurmedu, Palakkad - 678013. H&I: Dancing, listening to music and swimming.
11. Lydia Lazar(13), Std VIII A, Kendriya Vidhyalaya, Purnatukara, Thrissur, Kerala. H&I: Playing indoor games, watching TV and reading.
12. Vinayak S Nair(10), S/o Lt. Col. Sunil Nair, OC, 19 R&O Flt, C/o 56 APO. H&I: Watching TV, playing cricket and listening to music.
13. C. Lalrempuii(16), C/o C. Hrangdingliana, Rahsiveng - 1, Section -

Welcome to Pen Pals CLUB

Send us particulars regarding your name and address, age, the standard you study, your hobbies and interests, to the following address

Co-ordinator,
Pen Pals Club,
Children's Digest,
P. B. No. 7,
Kottayam-686001,
Kerala, India.

III, Lunglei, Mizoram - 796012. H&I: Reading, listening to music and dancing.

14. Ritesh Meera(10), Std VI A, Kumbha House, Sainik School, Chittorgarh. H&I: Watching TV and gardening.
15. Aditi Chauhan, C-148 Dayanand Marg, Tilak Nagar, Jaipur, Rajasthan - 302004. H&I: Painting, listening to music and friendship.
16. Padma Yangchan(13), 44 A/B Gandhi Nagar, Jammu - 180001, J&K. H&I: Reading, skating and watching TV.
17. Meu Amoeba Oasis, C/o Dr. Ramani Barman, Joint Registrar, G. U. Guwahati - 14, Assam. H&I: Watching movies and helping the old.
18. Neethu Mariam Philip, Std VII, Lourdes Public School, Collectorate P.O., Kottayam -1, Kerala. H&I: Reading, drawing and playing outdoor games.
19. Manjeet Singh(14), Chola House, Sainik School, Amaravathi Nagar - 642102. H&I: Playing football, computer games and reading.
20. A. Vignesh(14), Std IX, Chola House, Sainik School, Amaravathi Nagar - 642102. H&I: Playing basketball, swimming and reading.
21. R. Shruthi Naidu(17), Ist PUC, Sharada Residential School, Kunjibettu, Udupi - 576102, Karnataka. H&I: Collecting coins, listening to music and painting.
22. G. Praveena Yadav(17), Ist PUC, Sharada Residential School, Kunjibettu, Udupi - 576102, Karnataka. H&I: Reading, watching TV and listening to music.
23. Bharat Acharya(18), 108, Gujarat Vihar, Near Preet Vihar, Vikas Marg, New Delhi - 110092. H&I: Listening to music, playing computer games and travelling.
24. Ashok Priyadarshi(17), 20/A, Alipur Road, Civil Line, Old Delhi - 110054. H&I: Listening to music and reading.
25. Juhi Mansuri(13), Std VIII A, Jawahar Navodaya Vidyalaya, Mandaphia, Bhadhesar, Rajasthan. H&I: Playing T.T., listening to music and singing.
26. Ranjana Elizabeth James(16), Edattukunnel House, Hosmar P.O., Kankala, Karnataka - 574107. H&I: Reading, watching movies and gardening.
27. Justine Joseph(16), Chackalakudiyil, Puttady - 685551, Kerala. H&I: Travelling, listening to music and collecting stamps.
28. M. Bala Guhan(15), Std IX, Chola House, Sainik School, Amaravathinagr - 642102. H&I: Reading, trekking and boxing.

YOUNG ARTISTS

Angel, VII A, Sacred Heart Convent School, Mathura. UP.

Anandu Sreekumar, III D, Infant Jesus HSS, Thangasseri, Kollam.

Gaurav Singhal, V B, St. Joseph Convent Sec. School, Bathinda.

Merlin Geevarghese, VI A, Holy Child School, Tagore Garden, New Delhi-27.

M. Yamini, IV A, Sri Sankara Senior Secondary School, Chennai.

Chaitali V. Gaonkar, 22/349, Siddharth Nagar-4, Goregaon (W), Mumbai-400062.

Sheheba Parveen, VII, Silver Hills Higher Secondary School, Kozhikode.

Sourav Dutta, III, Atomic Energy Central School, Indore-452013.

Suranya **Suresh**, VIII B, Kendriya Vidyalaya, Pattom.

K. S. Krishna Preeti, V B, Vedavalli Vidyalaya Senior Secondary School, Walajapet-632513.

K. Vardhini, IX A, Vedavalli Vidyalaya Senior Secondary School, Walajapet-632513.

Praveen Nair, Qrs No. 414/H, Railway Colony, Hemambika Nagar, Olavakkod, Palakkad-678009.

Pinky Panketh F., VII, Assissi Vidyaniketan Public School, Perumpilly, Vypeen, Cochin.

Ashwarya Agarwal, VI A, Christ Church Girl's Senior Secondary School, Jabalpur.

Jiya Merin Johnson, IV B, St. Joseph's School, Alappuzha.

Teena Paulson, VII, St. Joseph's EMHSS, Aloor, Thrissur.

Shreedutt C. Hegde, VI, CIS School, Aundh, Pune-27.

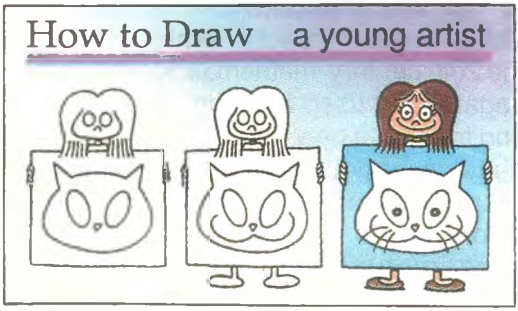
G. Kiriti, VI, Teja International High School, Yellapoor, Hasanpathy, Warangal-506371.

Ronald Paul C., VII B, St. Joseph English Medium Higher Secondary School, Eravu, Thrissur.

Adya Jha, J.N. College Campus, Pasighat, AP-791103.

S. G. Beeresh Kumar, VIII B, Kendriya Vidyalaya, Indian Institute of Science, Bangalore-560012.

S. Siddharth, V B, Vedavalli Vidyalaya Senior Secondary School, Walajapet-632513.



- P. Gopalakrishnan

Amalie Emmy Noether

(1882 – 1935)

Symmetry in Physics

Amalie Emmy Noether was a brilliant mathematician. With the 20th century, mathematics began to be used to arrive at and formulate new theories in physics and to prove and establish findings made through laboratory experimentation. As a mathematician Noether greatly influenced physics. She showed that symmetry plays a very important role in the laws of physics.

Her theory established a connection between the concept of symmetry and the conservation laws. Symmetry means sameness without being completely identical. It is what a mirror image has

with regard to its original. For example, either +2 or -2 can be the square root of the number 4. One is like the mirror image of the other, symmetrical with it. This symmetry is what nature achieves through her laws, for example the laws of conservation of energy, momentum and angular momentum.

Noether's ideas were used by Albert Einstein in his work on relativity. Physicists have discovered more than a dozen conservation laws and the symmetries associated with them. In fact her idea of symmetry has become one of the foundations of modern physics. It has also helped Paul Dirac to reach the concept of anti-matter - that wherever matter exists, its mirror image also exists. The electron was cited as an example. Dirac said that another particle with properties the same as the electron must exist. This particle was later seen by Carl Anderson in an experiment he was conducting in the laboratory. It was a 'mirror image' of the electron with the same mass but bearing an opposite electric charge, that is, positive to the electron's negative charge. So it was named 'positron'.

Emmy Noether was born on 23 March 1882 in Erlangen, Bavaria, Germany. Her father was Max Noether, a distinguished mathematician and a professor at the University of Erlangen. Her mother, Ida Kaufman came from a wealthy family of Cologne. Both Emmy's parents were of Jewish origin. They had four children, and Emmy was the eldest and the only girl, the

Did You Know?

A full-grown bear can run as fast as a horse.

Did You Know?

Kiwis are the only known bird to have nostrils located at the tip of their beak.

three younger children being boys.

Emmy was sent to a local school, the *Hohere Tocher Schule*, where she studied till 1897 when she turned fifteen. In school she studied English, French and arithmetic in addition to her mother tongue German. She was also given piano lessons. She was like any normal teenage girl who loves dancing and looks forward to parties with friends. Her friends were mostly the children of her father's university colleagues. Her aim was to become a language teacher and she took the examination to qualify as a teacher. She passed the examination and got the certificate qualifying her to teach English and French in girls' schools of Bavaria. But she never became a language teacher. Instead she chose to study mathematics at the university. But this wasn't easy for women in those days in Germany as they were not admitted as regular students in German universities.

But they were allowed to study in the universities as unofficial students and for this they had to get the permission of the professor who taught the subject they wanted to study. Emmy secured the permission and

Bonnie and Booboo

sat for maths lectures at the University of Erlangen during 1900 to 1902. She passed the examination in March the following year, but being a woman she had permission only to sit in the classes. So she was not a proper student who could secure a degree. In fact she attended two universities; first the University of Erlangen and then the University of Gottingen.

Fortunately in 1904 the University of Erlangen decided to admit women as regular students, and Emmy returned there. After four years, in 1908, she took her doctorate in mathematics from there with a thesis in algebra.

For seven years she worked at the University of Erlangen without salary as women weren't paid salary in those times in Germany and possibly in many other parts of Europe as well. Sometimes she acted as substitute lecturer for her father who was professor there, when he happened to be ill. In 1908 she was invited to join the reputed institution for mathematics, the *Circolo Matematico di Palermo*, and in 1909 to join the German Mathematical Society. But still she could not obtain a paying position at a university in

Germany.

In 1915, she was invited to join the Mathematical Institute in Gottingen, again to work without salary. It was there that she did the important mathematical work that confirmed key parts of Einstein's General Theory of Relativity.

Felix Klein and David Hilbert, two mathematicians of repute, who had advised and helped Emmy in her career in mathematics, were working at the Institute and in fact it was they who had invited her to join there. Hilbert continued to work to get Emmy Noether accepted as a faculty member at the university, but he was unsuccessful against the traditional bias against women scholars. He was able to make the university allow her to lecture in his own courses, that too without salary. In 1922, she won the right to be a *privatdozent* - she could teach students, and they would pay her directly, but the university wouldn't pay her anything. The situation changed slightly by 1922 when the university gave her a position with a

Did You Know?

A tsunami is a series of great sea waves caused by an underwater earthquake, landslide, or volcanic eruption. More rarely, a tsunami can be generated by a giant meteor impacting with the ocean.

Tsunami (pronounced tsoo-NAH-mee) is a Japanese word which translates as "harbour wave". Tsunamis are fairly common in Japan and many thousands of Japanese have been killed by them in recent centuries.

The Tsunami Warning System (TWS) in the Pacific, comprised of 26 member countries, monitors seismological and tidal stations throughout the Pacific region. The system evaluates potentially tsunamigenic earthquakes and issues tsunami warnings. There is currently no international warning system for tsunamis in the Indian Ocean.

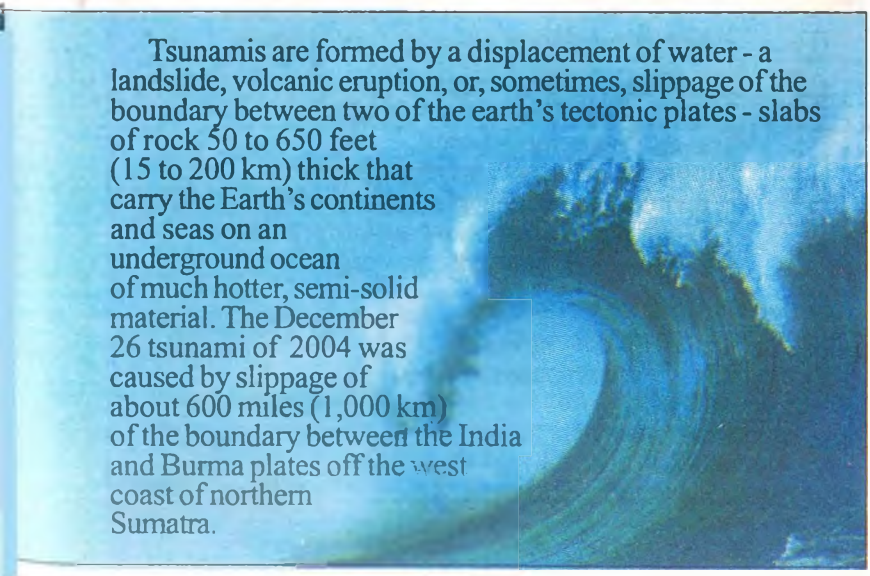
small salary without taking her into service or giving the right to claim other benefits.

Emmy Noether was a popular teacher with the students. To her students she was more like a friend than a teacher. She made them participate in the class making them work out the mathematics themselves or help her in working out the problems.

Her work in algebra earned her recognition and she was invited in 1928 - 1929 as visiting professor at the University of Moscow and in 1930 at the University of Frankfurt.

When the Nazis came to power in Germany they started persecuting the Jews. Though she was never able to get a regular faculty position at the University of Gottingen she was one of the many Jewish faculty members purged by the Nazis in 1933. Like many other Jewish intellectuals, she fled Germany in 1933 to escape from the Nazis, taking refuge in the United States. In the United States she became visiting professor at Bryn

Tsunamis are formed by a displacement of water - a landslide, volcanic eruption, or, sometimes, slippage of the boundary between two of the earth's tectonic plates - slabs of rock 50 to 650 feet (15 to 200 km) thick that carry the Earth's continents and seas on an underground ocean of much hotter, semi-solid material. The December 26 tsunami of 2004 was caused by slippage of about 600 miles (1,000 km) of the boundary between the India and Burma plates off the west coast of northern Sumatra.



Did You Know?

Pain is measured in units of "dols". The instrument used to measure pain is a "dolorimeter".

Mawr College, a women's school outside Philadelphia. She also got a position as lecturer at the prestigious Institute of Advanced Study in Princeton. It was at Bryn Mawr College that Emmy Noether was paid a full professor's salary for the first time in her life and accepted as a full faculty member.

But her success was not to last long. In 1935, she developed complications from an operation to remove a uterine tumour and died shortly after. After World War II ended, the University of Erlangen in her hometown honoured her memory and in that city a co-educational gymnasium (school) specializing in mathematics was named after her. Her ashes are buried near the Bryn Mawr library. ●

Write

There are different ways to write things

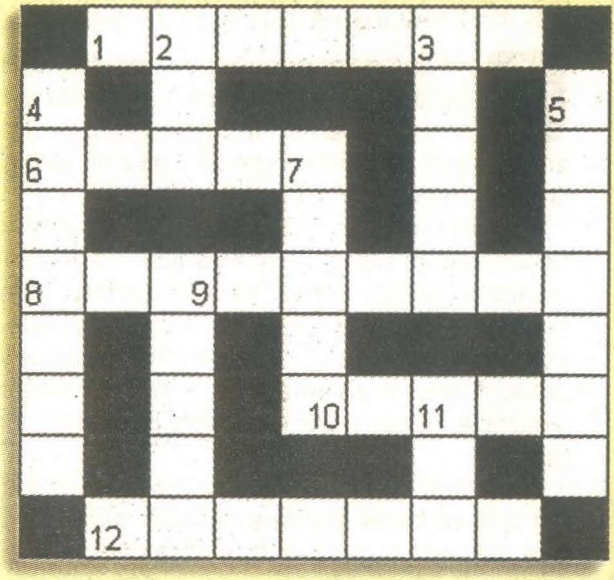
Musicians *compose* music.
When you are bored, you *doodle*.
You *jot* down rough notes.
People *print* books and newspapers.
When you are in a hurry you *scrawl* or *scribble*.
You can *type* things or use a wordprocessor.
Another word for a writer is *author*.

Different kinds of writers are

a writer of novels - *novelist*
a writer for a newspaper - *journalist*
a person who writes for radio or TV - *scriptwriter*
a person who writes plays - *dramatist or playwright.*
Someone who writes music is a *composer.*

Crossword

- K. S. Geethavani, Coimbatore



Across:

1. Carbon ———— : CO_2 (7)
6. Nude (5)
8. The ———— index to the mind (4,2,3)
10. ———— Bear: eucalyptus leaf eater (5)
12. Liquid metal (4)

Down:

2. Writing fluid (3)
3. Account entry showing amount paid (4)
4. Dress worn to school (5)
5. Fastest animal (7)
7. Swallow liquid (7)
9. Run after something (5)
11. We breathe this (4)

(See page 97)

-Jee

Ball-point Pen

The ball-point pen was invented by a Hungarian called Laszlo Biro. Biro was a man of many talents. He was a journalist, painter, and sculptor. He knew hypnosis as well, and sometimes worked as a hypnotist.

It was the year 1935. Biro was working with a newspaper in Hungary as its editor. As editor it was his job to select, correct and sometimes compose articles. He had to make the articles concise, with deletions or additions, revise them if necessary, and present them in an attractive form. This meant considerable paper work for which Biro used a fountain pen.

Fountain pens have smooth points, so the writing comes clear and fine, without blur. But Biro's pen was not a good one, it scratched and ripped the paper. He had to change the paper and rewrite again. Sometimes the pen overflowed leaving blobs of ink on the writing. Then he had to use a blotter, or sometimes write it all over again on a fresh sheet of paper. All these interruptions and the frequent refilling of the fountain pen irritated Biro as they slowed down his work. He thought how nice it would be if there were such a pen that went on writing smooth and fine without the necessity of frequent filling of ink, and which

Did You Know?

There are now more than 4000 satellites orbiting the globe.

never made ink blobs on the paper. He visualized his ideal pen, as one with its own supply system of ink and with a pointed, but soft tip that never scratched.

Suppose he, Biro, was to design it!

He discussed the idea with his brother Georg, who was a chemist. Georg agreed to help him. They set about designing a pen with its own ink supply and with a writing tip that produced fine, steady, clear letters. The early attempts were failures. The brothers tried again and finally found the design for a pen that answered their expectations.

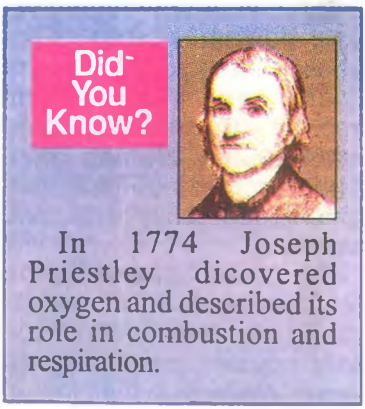
Technically it was a superb work, but wasn't suited to everybody's pocket, as its production was expensive. It remained a fancy item for quite awhile.

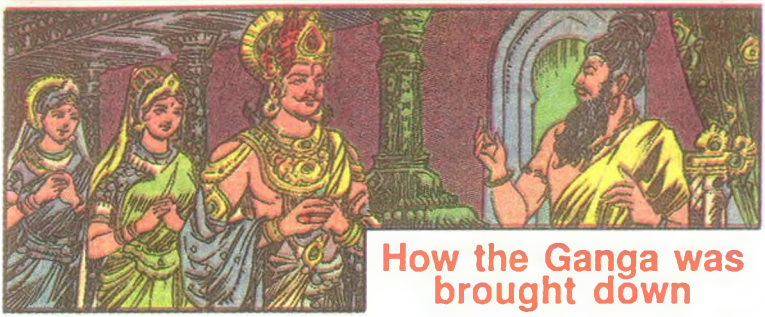
Then luck turned with the starting of the Second World War. It was so with many inventions and products. The World War, a mammoth tragedy for humanity, did at the same time benefit many unknown innovators and entrepreneurs.

The ball-point pen caught the attention of air-force pilots. They discovered that this new pen was ideal for high altitudes. It became popular with the Air Force. Unlike the fountain pen it didn't depend on gravity and went on writing without having to be ink-filled now and then. Its fame spilled out into the civil population.

The first market sale took place in New York in 1945. It was an event by itself. People thronged and squeezed in front of the sales counter to be among the first owners of the miracle pen. The entire stock of 10,000 pens was sold out in a single day. The ball-point pen had arrived.

●





How the Ganga was brought down

Long ago, King Sagara, an ancestor of Rama, was ruling Ayodhya. He was sad that he had no children to succeed him. Accompanied by his queens, Kesini and Sumati, he went to the Himalayas to offer penance.

Sage Bhrigu was pleased. He blessed the king: "One of your queens shall give birth to a son who will continue your lineage; the other shall bear sixty thousand mighty sons who will bring you fame."

The sage's words came true. Kesini's son was named Asamanjasa. Sumati gave birth to a mass of flesh from which rose sixty thousand babies.

As time passed, the princes grew into robust, intelligent youths. When the sixty thousand princes proved a great strength to their father, Sagara found to his dismay that Asamanjasa was unfit to become a ruler. Soon he renounced the world and left the kingdom, leaving behind a young son, Anshuman.

There was little to worry Sagara now. With his sons' might added to his own, he need not fear any enemy. He decided to perform the Aswamedha Yajna – befitting the greatest of rulers. A fine horse was consecrated to the gods and allowed to wander all over the earth. On its return, it would be sacrificed.

No one dared challenge Sagara by capturing or killing his horse. The yajna was thus a great success. From then on, he began performing the Aswamedha Yajna regularly.

When the news spread that Sagara was about to perform the sacrifice for the

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100th time, the king of gods, Indra, panicked. How could he allow Sagara to become more powerful than he himself?

Indra decided that by hook or by crook, he must stop Sagara. He descended to earth in the guise of a demon, and stole the sacrificial horse.

The mysterious disappearance of the horse left Sagara chagrined, because a rite of this nature could not be abandoned midway. Thus, it was imperative the horse was found and the yajna completed.

Accordingly, Sagara called his sixty thousand sons and ordered them to find the horse. They fanned out into the four corners and began a search. After they had combed the earth,they dug their way to the nether-world. Their efforts were rewarded when they came across the horse outside an ashram. They found Sage Kapila sitting outside, lost to the world in a trance.

The brothers concluded that it was Kapila who had stolen the horse. They fell upon him. "Here's the thief pretending to be a yogi!"

Kapila was enraged at being disturbed by a false

accusation. As he glared at the intruders, columns of fire shot out of his eyes. Within moments, nothing was left of the sixty thousand princes except for a huge pile of ashes. Indra, the real thief, had cleverly left the horse here with this very intention.

After waiting in vain for his sons to return, Sagara sent Anshuman to look for them. His search led him to the nether-world, where he was delighted to find the sacrificial horse. But he was distressed to see heaps of ash all over the place. Could they be all that remained of his valiant uncles?

At that juncture, he met Garuda (who happened to be the maternal uncle of the dead princes). He informed Anshuman

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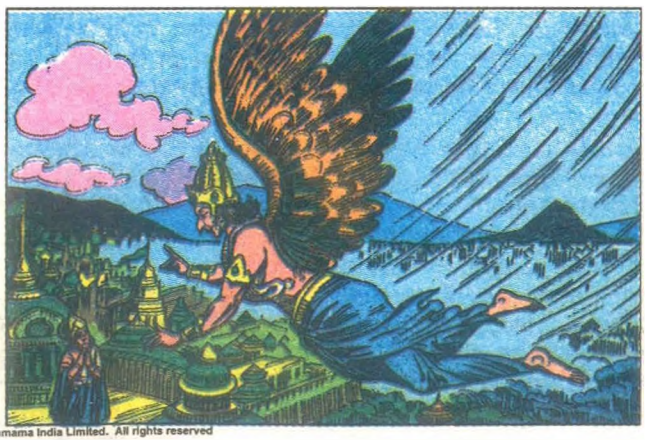
of the fate that had befallen his uncles and said, "Son, take the horse and complete the *yajna*. If these ashes are to be watered according to custom so that the souls of the princes may rest in peace, Ganga should be brought down here from heaven."

Anshuman sorrowfully returned home with the horse and told his grandfather all that had happened. Sagara was heart-broken. However, he completed his *yajna*. Soon, he died disconsolate.

Anshuman, who succeeded him, was obsessed with the idea of bringing the Ganga down to liberate his uncles' souls. But he was unable to do anything in this regard. He passed on this obsession to his son, Dilipa, who too tried, but in vain.

Dilipa's son, Bhagiratha, was determined to succeed where his father and grandfather had failed. He commenced rigorous austerities, meditating in the blazing sun with fire on all sides and taking food only once a month.

Pleased with his dedication, Brahma appeared before him and asked him what boon he sought. Bhagiratha replied, "Cursed by Sage Kapila, my ancestors lie in a heap of ash in the nether-world. I want the waters of Ganga to wash the ashes so that their souls may ascend to heaven. Please send the Ganga down to earth for this!"



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Brahma said, "So be it. But there is one difficulty. The earth cannot withstand the force of Ganga's descent; Siva alone can take on the river. Therefore you must pray to him."

Bhagiratha renewed his austerities and continued long without food or water. Eventually, Siva appeared before him and promised help. At long last, the path was clear for the descent of the Ganga to earth.

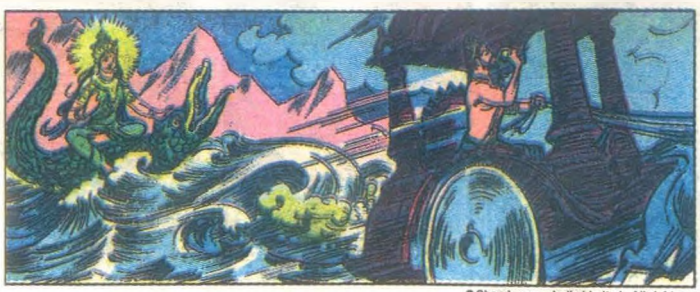
Brahma now ordered Ganga to descend on to Siva's head. Proud of her strength, Ganga thought, "I shall fall on Siva with such force that would sweep him away to the nether-world!"

Siva divined her thoughts and decided to teach her a lesson. The flood that fell on his head was held by his matted hair. Ganga tried her best but not a drop could emerge from the tangled maze of Siva's matted locks! Ganga had learnt her lesson all right, but she disappeared. There was nothing for Bhagiratha but to meditate on Siva again, until the latter gently let out the waters from his locks, from where they flowed down in seven small separate streams.

Ganga followed Bhagiratha's triumphal chariot. The gods assembled above to witness the grand sight. Sometimes slow, sometimes fast, now sliding down, now jumping up, the river danced her way behind Bhagiratha.

Ganga reached the nether-world through the ocean. Bhagiratha performed the funeral rites for his ancestors and ensured their entry to heaven. Thus was his unique mission fulfilled at last!

- Retold ***Rajee Raman***



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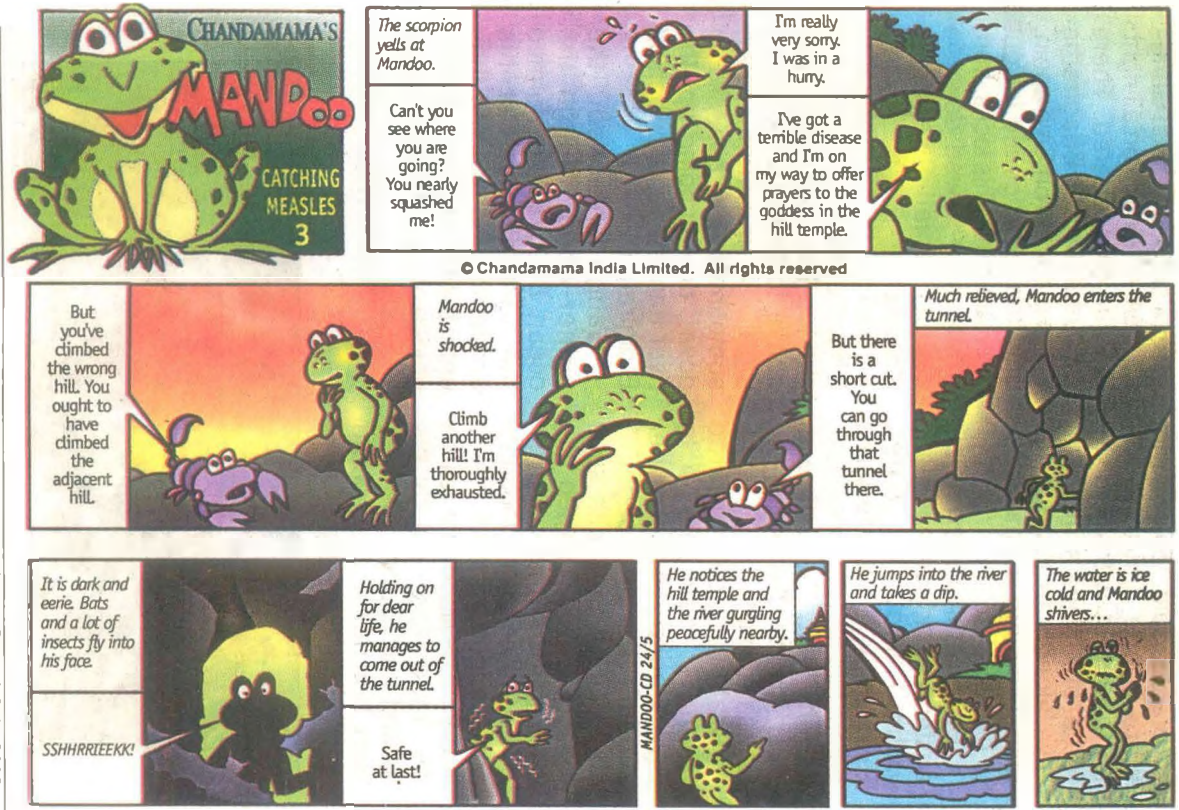
CHANDAMAMA'S
MANDOO
CATCHING MEASLES 3
The scorpion yells at Mandoo.
Can't you see where you are going? You nearly squashed me!
I'm really very sorry. I was in a hurry.
I've got a terrible disease and I'm on my way to offer prayers to the goddess in the hill temple.
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But you've climbed the wrong hill. You ought to have climbed the adjacent hill.
Mandoo is shocked.
Climb another hill! I'm thoroughly exhausted.
But there is a short cut. You can go through that tunnel there.
Much relieved, Mandoo enters the tunnel.
It is dark and eerie. Bats and a lot of insects fly into his face.
SSHHRRIEEKK!
Holding on for dear life, he manages to come out of the tunnel.
Safe at last!
MANDOO-CD 24/5
He notices the hill temple and the river gurgling peacefully nearby.
He jumps into the river and takes a dip.
The water is ice cold and Mandoo shivers...

Mandoo climbs the hill, still wet, and offers his prayers at the temple piously.
The goddess must be pleased with my devotion. I'll soon recover.
The rashes haven't gone as yet! But I'm sure they will, with the goddess's blessings!
He rushes to look into the mirror, as soon as he reaches home.
Not yet!

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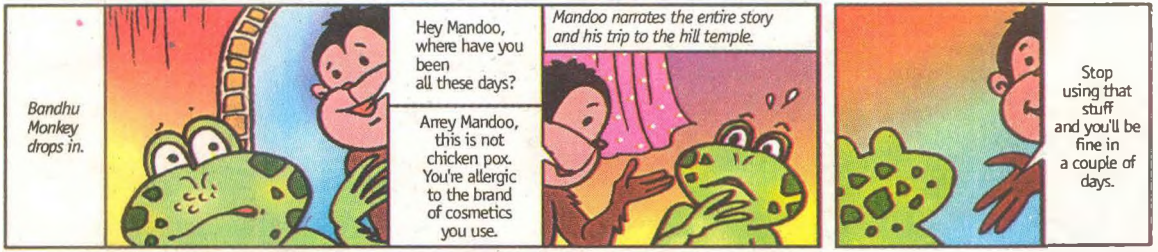
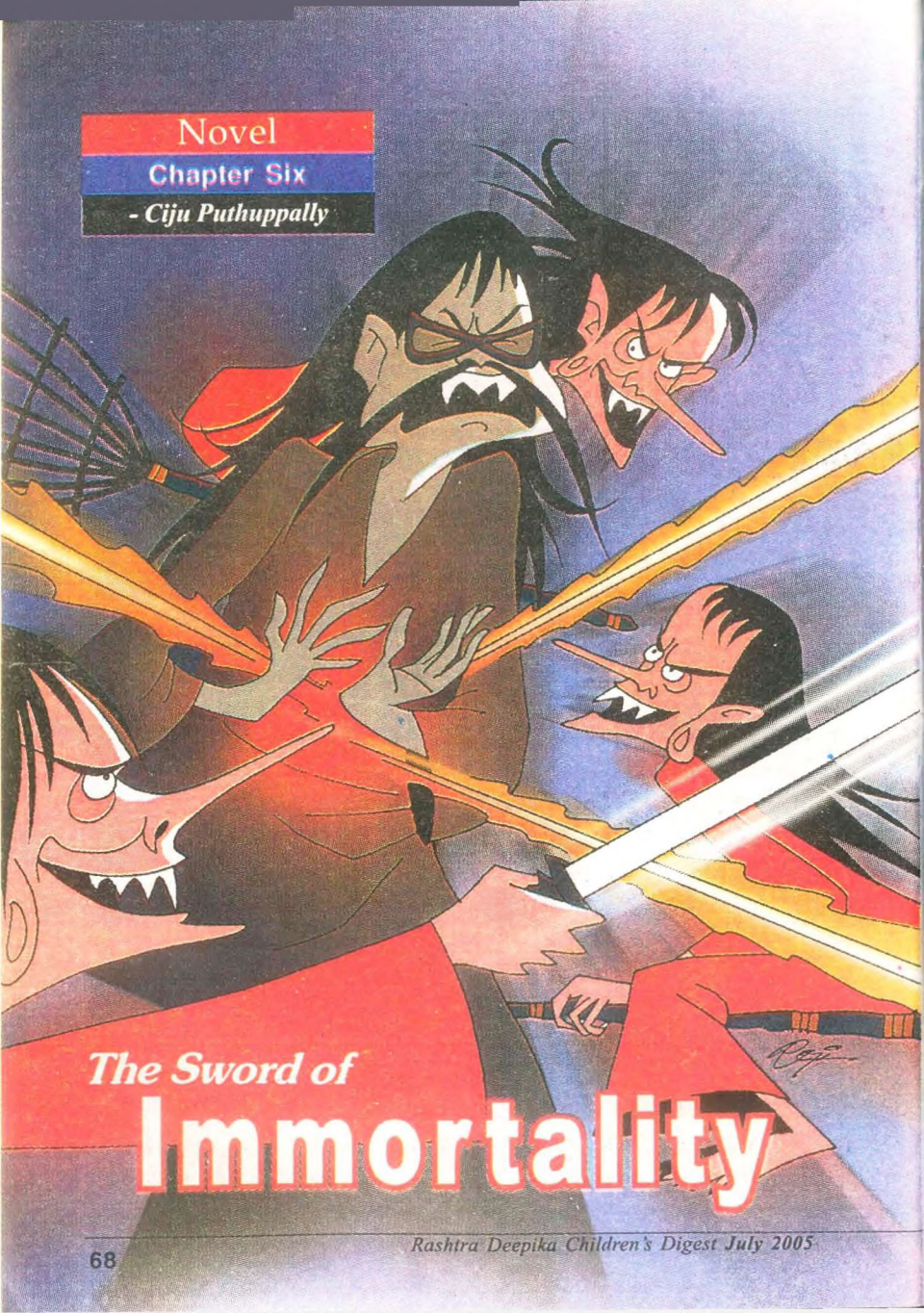

Bandhu Monkey drops in.
Hey Mandoo, where have you been all these days?
Arrey Mandoo, this is not chicken pox. You're allergic to the brand of cosmetics you use.
Mandoo narrates the entire story and his trip to the hill temple.
Stop using that stuff and you'll be fine in a couple of days.

True enough, Mandoo's rashes vanish in a week's time.
He visits Malli with a huge bouquet of flowers. Malli is delighted.
MANDOO-CD 24/6
Oh Mandoo! I was so worried about you.
Contd.

Novel

Chapter Six

- *Ciju Puthuppally*



The Sword of Immortality

Garla was sleeping in the cell. Two days had passed since she was put there.

"Wake up, Garla," a friendly voice said. She opened her eyes and saw Adavin. He had made a hole big enough for her to escape.

"This is me, Adavin."

"Adavin?" Garla's voice was barely a whisper. She had no energy.

"I'm Wiseman's friend. I've come to help you. Where's King Dane?"

"He... he's been taken to Black Palace," Garla murmured. "Watch out, there are guards."

A goblin heard the noise and swung a sword at them.

"Who are..."

Before he could finish, Adavin punched him in the face; the goblin fell to the ground. Adavin muttered a spell and the goblin vanished.

"Follow me," he ordered. They went up a staircase into the entrance hall. Two goblins were guarding the door that led outside.

"Stone," Adavin whispered. A stone appeared in his hand. He threw it in the other direction. It made a noise.

"Hey, someone's there!" one of the goblins said. The two of them ran off in the direction of the stone.

Garla and Adavin pushed the door open and ran away as quickly as they could.

"Thanks," Garla said.

"Stay here, I need to call my friends."

Adavin took off his cloak, stood on it and flew away.

After a while he came back with twenty wizards following him.

Mind Boggler

A woman shoots her husband. Then she holds him under water for over 5 minutes. Finally, she hangs him. But 5 minutes later they both go out together and enjoy a wonderful dinner together. How can this be?

(See page 97)

"Get on the cloak," Adavin said to Garla. "We're going to the Black Palace."

It took them about an hour to get there. A goblin was guarding the door.

"We'll need our wands for this," Adavin told the other wizards.

They were all wearing blue cloaks and Chivakas. They reached into their pockets and took out their black wands. Adavin had a silver one.

"Goblin killer," Adavin muttered, pointing his wand at the goblin guarding the door.

The goblin fell to the floor, dead.

"Listen, wizards," Adavin said. "One of you will stay here and guard Garla. I will go and free the king. Those of you who are coming with me will make the guards concentrate on you. Make a distraction. Understand?"

"Yes," the wizards said together.

Adavin went inside first. He walked into a hallway lit with candles. A staircase went up and down. He went down.

It took him to the cells. There were twenty cells. In one of them Dane was sitting down eating a rotten banana. The cell was guarded by three ugly witches. It would need more than one wizard to take on three witches together.

Did You Know?

Only one in one thousand animals born in the sea survives to maturity.

Adavin closed his eyes and concentrated on one of the other wizards.

"Help!" he said in his mind. "Get some wizards and come downstairs. I need help. There are witch..."

"Adavin, is it?" The witches were surrounding him, their brooms pointed at him.

Adavin hoped that at least one wizard would have heard his message.

He ducked as a flash of lightning whistled past his head.

"Sword," a witch said and her broom turned into a silver sword.

She swung it at him, making a cut in his wrist.

"Lightning!" the witches said together.

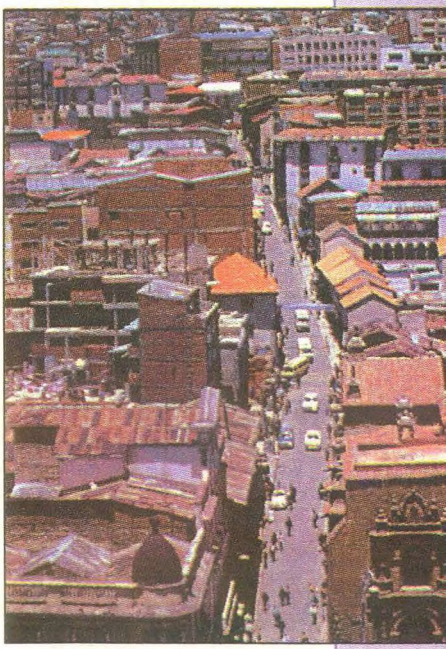
From all directions, flashes of lightning headed towards Adavin. He couldn't avoid them this time. All three of the flashes hit him on the stomach. He fell to his knees, clutching his stomach and groaning.

"Say your prayers, Adavin, you're going to heaven," one of the witches said.

Suddenly the door opened and five wizards rushed in, pointing their wands at the witches. Flashes of lightning came out of their wands, hitting the witches on their faces. The wizards broke the witches'

Did You Know?

La Paz, Bolivia is the world's most fireproof city. At 12,000 feet above sea level, the amount of oxygen in the air barely supports a flame.



Did You Know?

The fox, the coyote, and the hawk often follow badgers in order to catch animals that it has discovered.

brooms and locked the witches in the cells.

Adavin made a hole in the cell that Dane was locked in and helped him to walk out of the Black Palace.

"King!" Garla exclaimed. "You're safe!"

"Yes, he's safe," Adavin said. "This is the way you go if you want to go to the king's castle, so if Wiseman and the others come, we'll be here to meet them."

As Adavin said this, Wiseman's voice boomed across. "And here we are," he said.

"Wiseman!" Adavin exclaimed. "You're back! Did you get the plant?"

"Thanks to the triplets, we've got it!" Wiseman told them.

"We've still got some food from the journey," Garman said. "It's time for dinner."

"I'll make the potion," Adavin said, taking the Mortapulco plant. "You guys should take a rest after what you've just done." Adavin took off his cloak and flew

Ant Facts

"Argentine ants" keep herds of "cows" (plant lice). "Leaf-cutter ants" run 'farms,' raising their own food crops. The Mediterranean ant (aphaenogaster barbarus) makes "biscuits" from seeds. "Honey ants" store their food in living "storage tanks." "Amazon ants" have slaves to help with the work.

Ants have a communication "language," and each colony member has a task, working together to keep the colony fed, safe and healthy.

away.

It was getting dark so they decided to sleep.

When Adavin came back it was morning.

"There's a problem," he said. "We had too little of the plant so I'm afraid it will only last for exactly three days."

"Three days!" Wiseman exclaimed. One month was already too little, and now three days!

"I know, I know," Adavin said. "It's our only hope. Or don't you want King Dane to become immortal?"

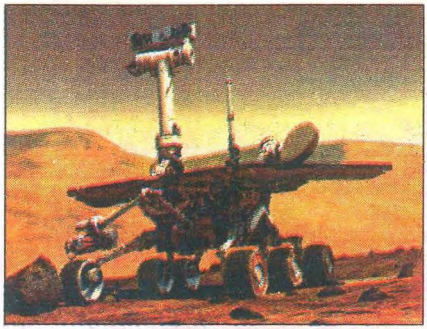
Wiseman sighed. Adavin gave a glass of purple liquid to Dane.

"Don't drink it before I tell you to," he said. "We don't want to waste a second. These wizards, Wiseman, Jerome, Garman and I will come with you, King Dane."

There were ten wizards that had survived when they had attacked the goblins in the Black Palace.

"There can be two creatures on each cloak," Adavin continued. "A wizard and one of you. King Dane can ride on my cloak. The cloaks will fly at full speed so hold on tight. When we get there, Wiseman and I will make the volcano erupt with our magic and the sword should come out with the lava

Did You Know?



The Mars Rover "Spirit" is powered by six small motors the size of "C" batteries. It has a top speed of 0.1 mph.

Did You Know?

Never hold your nose and cover your mouth when sneezing, as it can blow out your eyeballs.

and King Dane should take it. Is that clear?"

"But we also want to help!" Garla said plaintively. "Don't you, kids?"

The triplets nodded in agreement.

"O.K. Fine," Adavin agreed. "Now you can drink the potion, King Dane," he told the king.

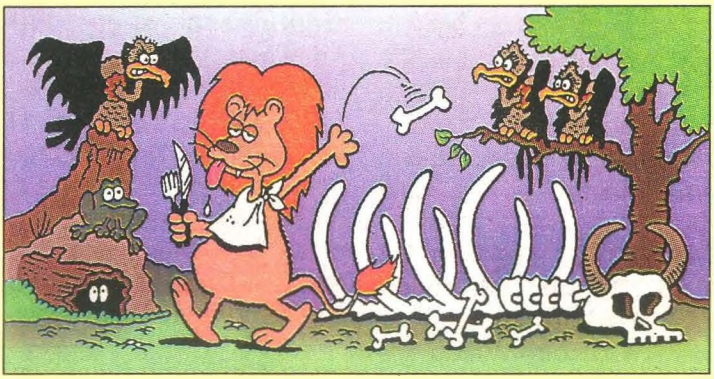
Dane brought the glass up to his mouth and swallowed the liquid. His body became smaller and younger. His hair turned blonde. His moustache and beard vanished. It was like pressing the rewind button on a video. He was now a Badrak boy, about twelve years old. He wore the same clothes that he was wearing earlier, just that they had turned small.

"Well, let's go!" Dane said in a young, energetic voice.

"Get on my cloak, king," Adavin said, "It's time to go."

(To be continued)

True or False



1) Lions are the only member of the cat family to live in groups.
2) Lions live in the dense jungles of Africa's rain forests.
3) Lion cubs are born with spots that will begin to fade at about three months.
4) Lions are the largest cats.

(See page 97)

RASHTRA DEEPIKA

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Meet One's Waterloo

- *R. K. Murthi, New Delhi*

"Have you started preparing for the admission test?" I ask my nephew.

"Uncle! You know that I never fail," he grins.

"That was what Napoleon Bonaparte thought till 18 January, 1815. On that day he met his Waterloo. And his hopes were blown apart,"

"Bonaparte and blown apart rhyme well," my nephew laughs.

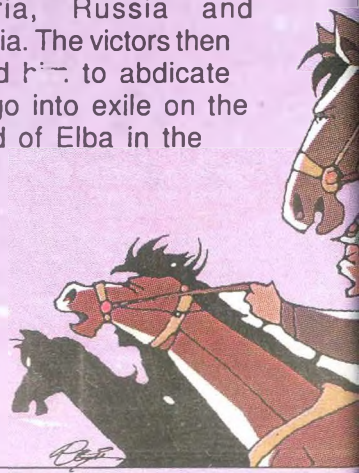
"This is no laughing matter. Prepare well. Or you may meet your Waterloo," I warn him.

"What do you mean?' my nephew asks.

I make him sit by my side and tell him this tale.

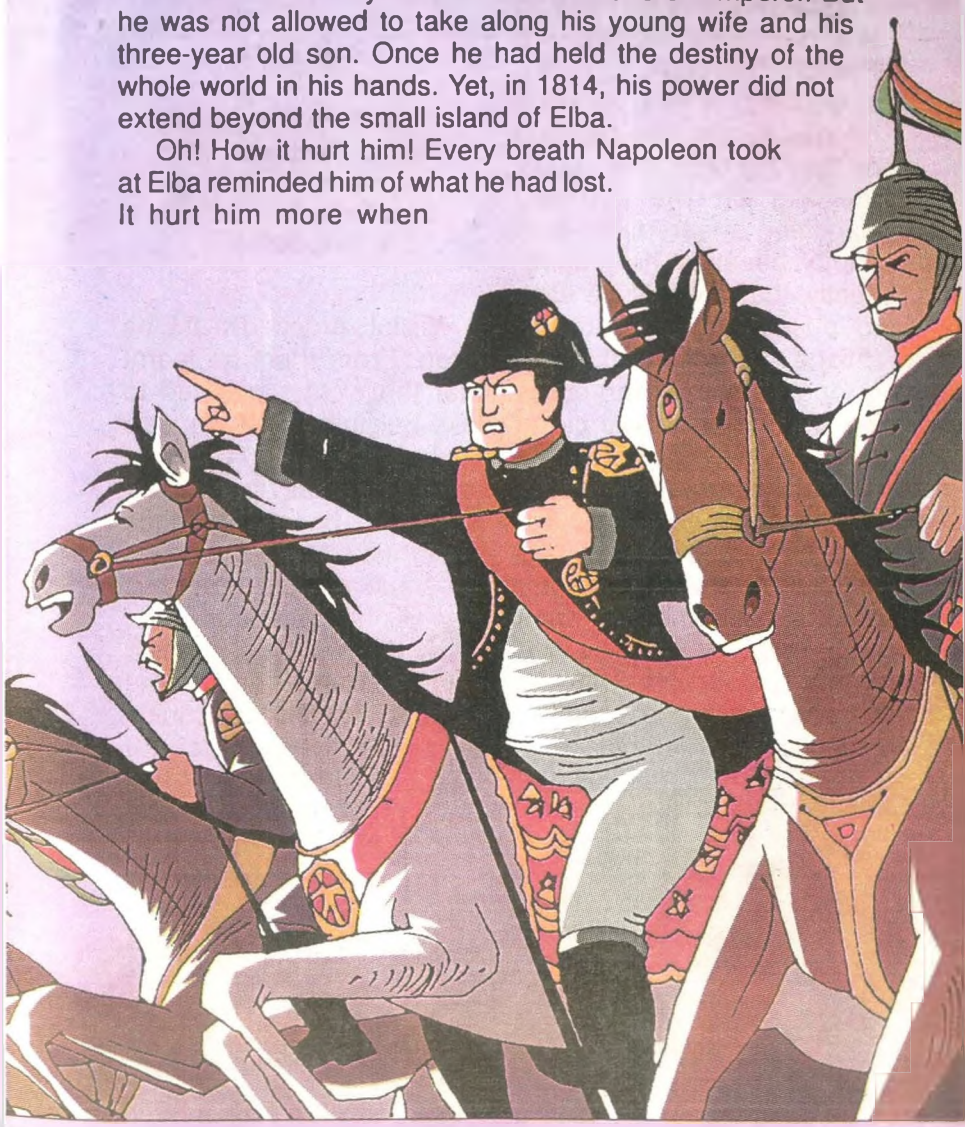
Waterloo is about 15 km south of Brussels. Here Napoleon lost his last bid for power. He lost even the right to the title of Emperor. He spent the rest of his life as a prisoner on St. Helena, a remote island in the Pacific. He remained a prisoner till death.

No defeat was as fatal as the one at Waterloo. Not even the one he suffered in 1814 at Leipzig, when he lost to the joint forces of England, Austria, Russia and Prussia. The victors then forced him to abdicate and go into exile on the Island of Elba in the



Mediterranean. They let him retain the title of Emperor. But he was not allowed to take along his young wife and his three-year old son. Once he had held the destiny of the whole world in his hands. Yet, in 1814, his power did not extend beyond the small island of Elba.

Oh! How it hurt him! Every breath Napoleon took at Elba reminded him of what he had lost. It hurt him more when



Louis, the brother of Louis XIV, who had lost his head on the guillotine during the French Revolution, a fat, stupid lump of flesh as many referred to him, was crowned as the King of France. "Louis the Pig on the throne!" Napoleon sneered. He was happy because he judged, rightly, that it would be easy to push 'the Pig' off the throne. That realization strengthened Napoleon's will to make a bold bid to seize power again. He told himself that he would regain his throne, reclaim his wife, Marie-Louise, daughter of the Austrian Emperor, and his son, who had been taken away to Austria. He would prepare his son to succeed him to the throne of France.

Did You Know?

The little hole in the sink that lets the water drain out, instead of flowing over the side, is called a "porcelator."

Visitors dropped in at Elba often. From them he learnt that the victors planned to take Belgium out of France's control. "Oh, no," Napoleon threw his hands up in horror. He felt the people of France would not take it lying down. He could exploit the public fury. His hopes soared.

He dared luck, and sailed secretly from Elba, in late February 1815, accompanied by a few of his Imperial Guards and landed near Cannes. "The people called. I came," Napoleon proudly announced on touching the French coast.

Sheer courage helped Napoleon regain the throne. For example, near

Did You Know?

The Galpagos Tortoise has a potential life span of 200 years.

Grenoble, he was riding through a narrow pass when he ran into a battalion of the royalists. He had very few men with him, so he ruled out armed resistance. Instead, he held his men in check, walked forward till he was within the range of their firepower, smiled at them and confidently greeted them. "I am your Emperor. Know me. If there is one among you who wishes to kill his Emperor," he paused, before adding, "I am here." Instantly the men rallied round him, hailing him as the Emperor. His acceptance by the people, he felt, was now complete. He turned to an aide and said, "As far as Grenoble, I was an adventurer; at Grenoble, I was a prince." On March 23, he was back in Paris, back at the seat of power.

Did You Know?

We forget 80 percent of what we learn every day.

Within a fortnight of his return, he began enjoying the power that had been his before he was packed off to Elba. His dramatic return to France stunned the

Did You Know?

Welwitschia is a plant which looks like an octopus and can live for 1000 years. It has only two leaves that shred into many long, leathery pieces as they grow. *Welwitschias* provide shelter for small desert animals and are an important part of the web of life in the desert. It grows in desert areas of Namibia and Angola, two countries in Africa.

Did You Know?

Dogs have about 100 different facial expressions, most of them made with the ears.

European powers that had managed, only a few months back, to drive him into exile. They got together to take him on. "This time around," they told each other, "we should finish him off, take away his title, and keep him a prisoner on a distant island."

Napoleon was not a novice. He knew the danger he faced. He had to strike before Lord Wellington got into the act. Wellington was at Brussels, working, overtime, to assemble the joint forces that would take on Napoleon's army. He wished he knew where Napoleon would strike. But there was no way he could find out in advance.

On June 16, 1815, Napoleon sprung the surprise. He led his men boldly, broke into Belgium through a gap near Charleroi, and beat the Prussian army led by Blucher. Then he commanded Marshal Grouchy to chase the Prussians, all 42,000 of them, to the end of the world, if need be. "Don't let Blucher regroup and rush to the help of the 68,000-strong combined force of Britain, Germany, Holland and Belgium under Lord Wellington," he told Grouchy. Having made that arrangement, Napoleon headed, with 72000 men, for Waterloo to take on Lord Wellington and the joint forces that he led.

Napoleon wanted to launch the attack early in the morning of June 18, 1815. But incessant rains during the night made his task difficult. The ground was slippery and therefore

GM

Did You Know?

At General Motors, the cost of health care for employees now exceeds the cost of steel.

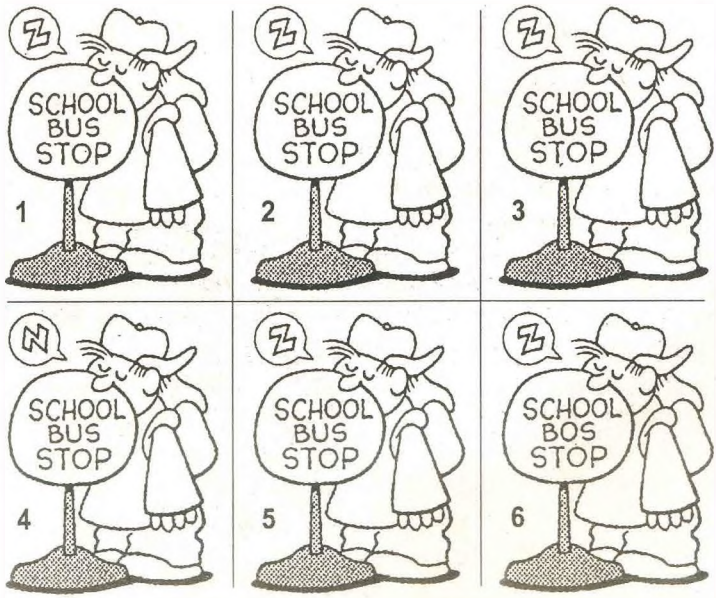
it was not possible to move the cannons. He reviewed the men, spoke to them, and boosted their morale by telling them, "It will be a picnic." He added confidently, "I shall sleep in Brussels tonight."

But the rains delayed the strike. That delay proved costly for Napoleon. It gave time to Lord Wellington to make foolproof plans. He sent word to Blucher to send at least 30,000 men to flank the French army. Blucher got into the act right away.

Finally at noon, Napoleon ordered his men to attack. The cannons boomed. The men ran in, shouting slogans hailing France and the Emperor, determined to break

Try It...

Which of the following two scenes are exactly alike?



(See page 97)

The ten highest mountains in the world are all in the Himalayas.

through the enemy's cordon, but failed to break through. Thousands died, many more were wounded and incapacitated. Napoleon kept moving around, breathing courage into his men till...

His heart sank on sighting the 42,000-strong force under Blucher outflank the French position. Grouchy had failed to hold the Prussians back. Napoleon's hope of victory vanished in a trice. Lord Wellington carried the day. Beaten squarely, Napoleon straggled with a few men to Paris. He was cornered, made a prisoner and sent off to St, Helena, sans power, sans title, and held captive there till his death in May 1821.

Napoleon's loss became Waterloo's gain. Today the whole world knows of Waterloo. Napoleon blew up his last chance of regaining power at Waterloo. We remember his tragic fate every time someone says, "Be watchful. Or you will meet your Waterloo, lose everything forever."

Did You Know?

More people study English in China than speak it in the United States of America.

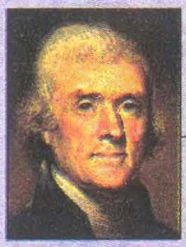
Catchy Quotes

- If you can dream it, you can do it.

  - Walt Disney

- I'm not afraid of storms, for I'm learning to sail my ship.

  - Louisa May Alcott



- The glow of one warm thought is to me worth more than money.

  - Thomas Jefferson

- There are two ways of exerting one's strength: one is pushing down, the other is pulling up.

  - Booker T. Washington

- In three words I can sum up everything I've learned about life: It goes on.

  - Robert Frost

- A weed is no more than a flower in disguise.

  - James Lowell

- Do not go where the path may lead; go instead where there is no path and leave a trail.

  - Ralph Waldo Emerson

- The joy that you give to others is the joy that comes back to you.

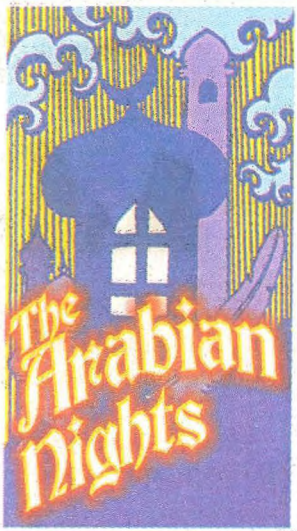
  - John Greenleaf Whittier

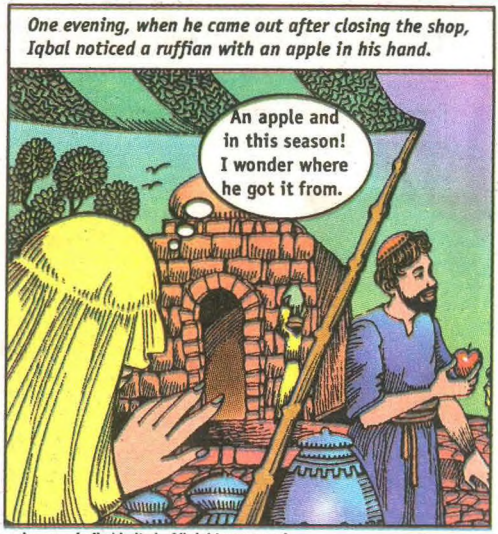
- Wheresoever you go, go with all your heart.

  - Confucius

- Security isn't what the wise person looks for - it's opportunity.

  - Earl Nightingale




One evening, when he came out after closing the shop, Iqbal noticed a ruffian with an apple in his hand.
An apple and in this season! I wonder where he got it from.

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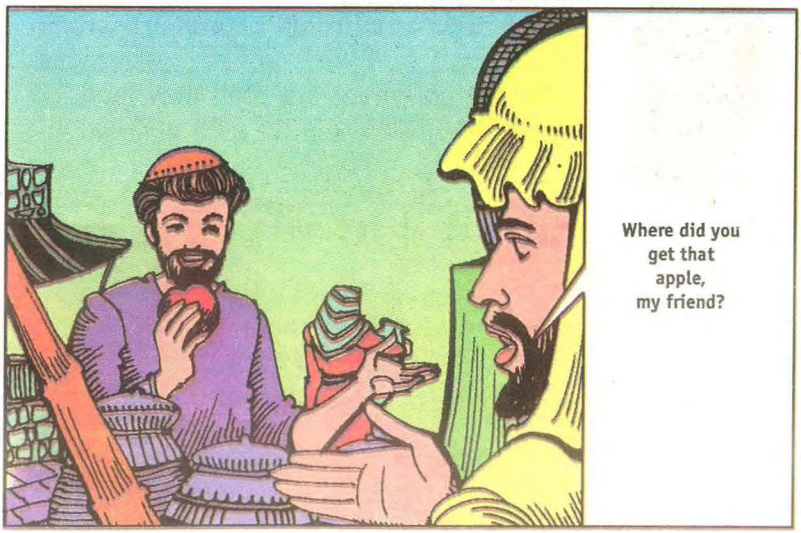

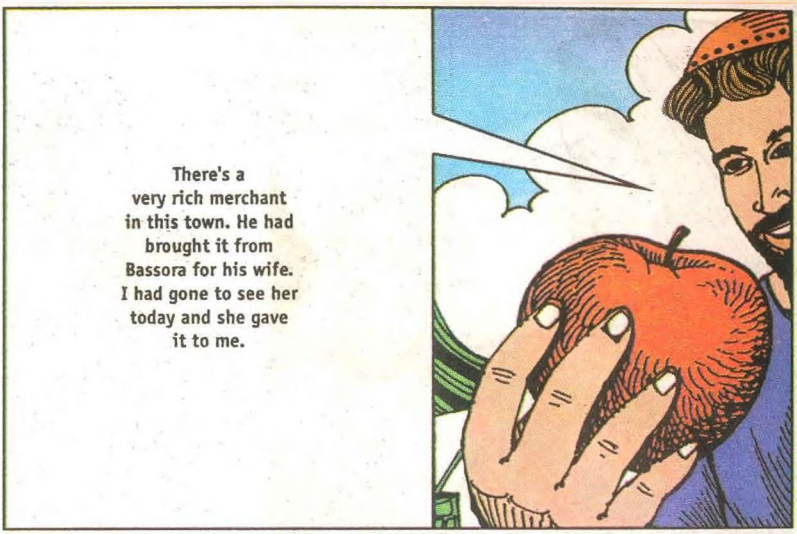
There's a very rich merchant in this town. He had brought it from Bassora for his wife. I had gone to see her today and she gave it to me.

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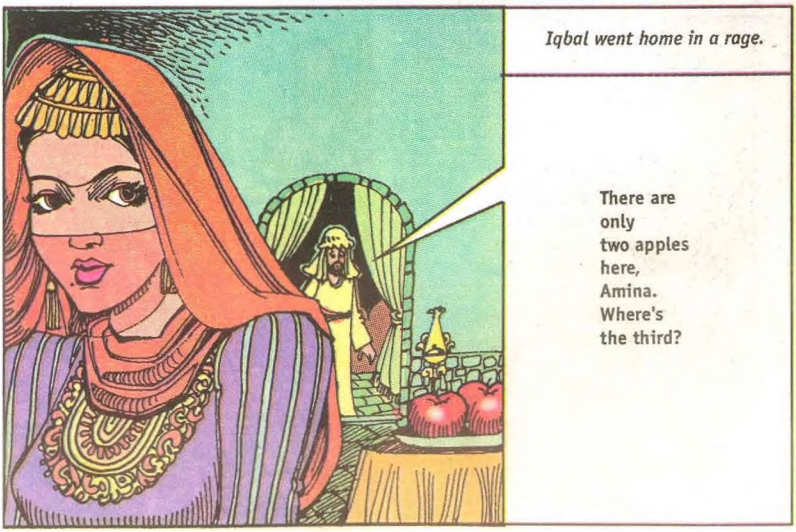

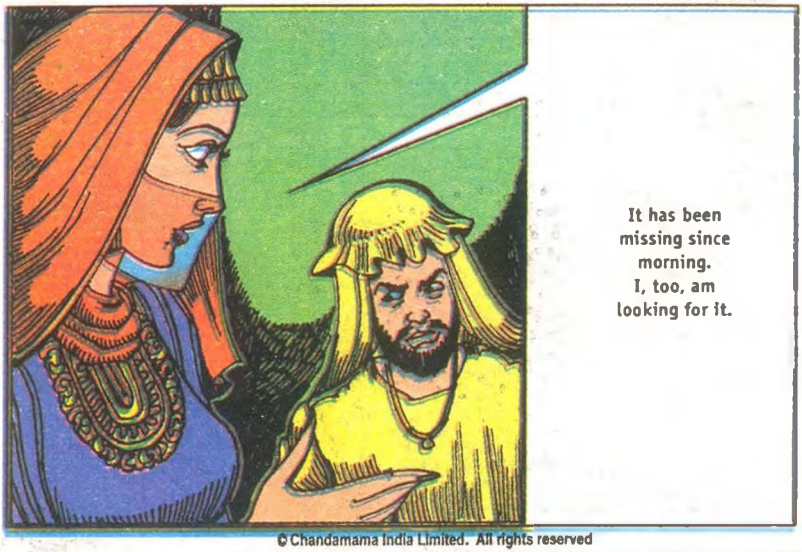

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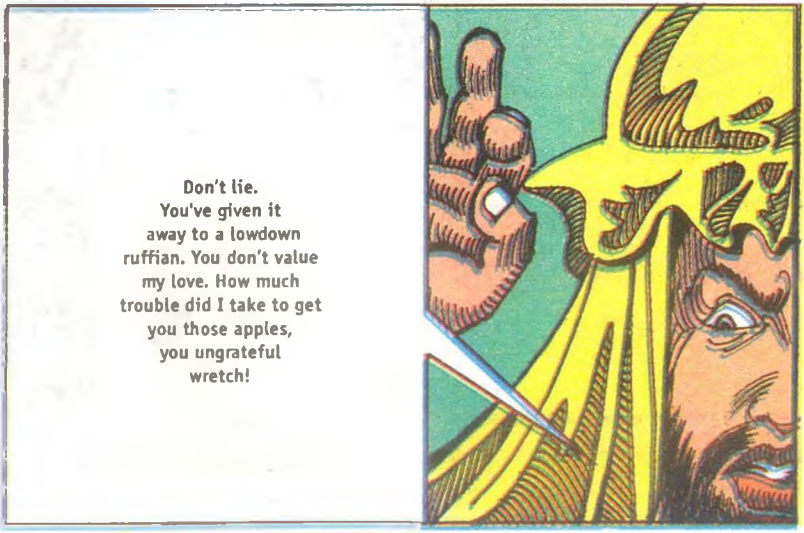
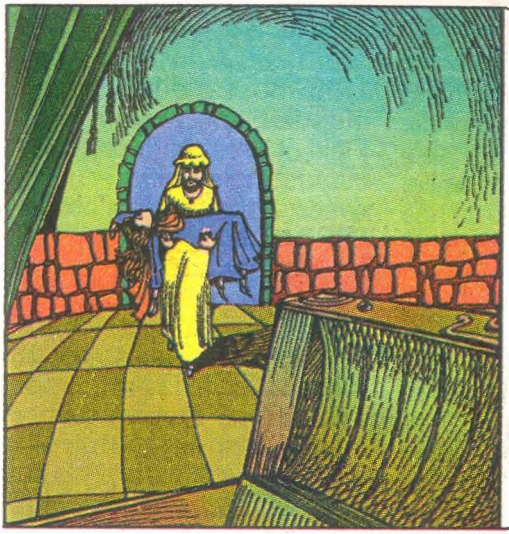

Don't lie. You've given it away to a lowdown ruffian. You don't value my love. How much trouble did I take to get you those apples, you ungrateful wretch!



In a fit of anger, he killed her. He then placed her body in a casket and left the room.

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As Iqbal came out of the room, he saw his son standing in a corner.

Why are you looking so gloomy, my son?

Contd.

Jason and the Golden Fleece - 9

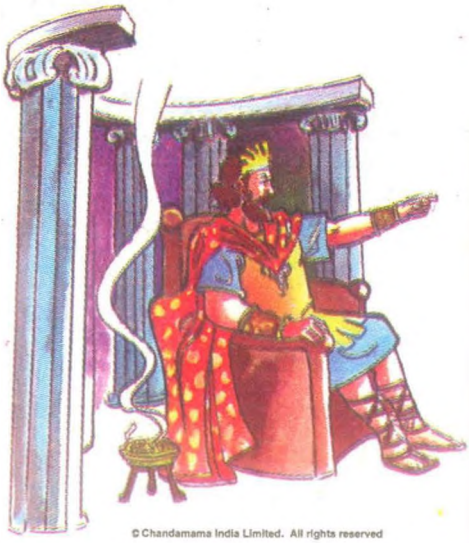
"Let me warn you, young man, it is no easy task to win the Golden Fleece," said King Aetes with a malicious smile. "One who wishes to do so has to perform some heroic labours which require superhuman courage and strength. Are you sure you want to try?"

"Yes, I am," replied Jason confidently.

"Good," said King Aetes and his smile broadened. "Here's what you must do. I've a pair of bulls, created by Hephaestus himself, which have bronze feet and breathe out columns of fire that consume all who dare approach them. Your first task is to tame and yoke them!" He paused to register the effect of this pronouncement on the listener.

His words struck Jason like a thunderbolt from a nightmare. It took him every ounce of self-control he possessed to compose himself and present an impassive countenance.

"Next," went on the king, "you must plough, before nightfall, four acres in the Field of Ares. After ploughing comes the sowing – not of seeds, but of serpent's teeth! Yes," here Aetes displayed his teeth in a fearsome grin, "I've a few of those, left over from Cadmus's sowing at Thebes and given to me by Athene. The moment you sow them in the furrows, armed men will spring out of the furrows and attack you. Vanquish them, and you shall



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have the Golden Fleece as the prize for your valour!"

Jason was stupefied. How was he to perform these unheard-of feats, which seemed beyond the ablities of any mortal?

The mocking voice of Aetes shook him out his reverie. "What do you say now, Jason? Would you still like to try it?"

With an effort, Jason pulled himself to his full height. His pride was at stake, and there was no way he could back out now. "I shall do it!" he declared, looking Aetes full in the face, his voice ringing with a confidence he did not feel.

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"Very well." There was a sharp note in Aetes' voice – was it disappointment or exultation? His face was an inscrutable mask. "Come and meet me tomorrow morning. We shall test your mettle!"

Jason turned and strode out of the palace, followed by his comrades. Medea watched the tall stranger, with concern and fear in her eyes, until he vanished from view.

Some time later, Medea was in her room, brooding over the day's events, when the door opened and her sister Chalciope burst in.

"What's the matter, Chalciope?" asked Medea, springing to her feet, for Chalciope was weeping bitterly.

"How could our father be so cruel?" cried Chalciope. "Didn't you see the faces of those brave young men of the *Argo*? They remind me of my dear husband – after all, they are his countrymen. Just by looking at them, I was carried back to the old days when Phrixus was alive and we were so happy together. Why, oh why, should that valiant hero, Jason, die in performing an impossible labour? Why doesn't Father give up the Golden Fleece to them, so

that my poor husband's soul may find peace?"

Medea's heart leapt with hope, for, Chalciope was unconsciously echoing her own thoughts. If only Chalciope would extend her support now, she (Medea) could come to the handsome stranger's rescue!

Slyly she tested the waters with a question, "Do you think Jason really deserves to win the Fleece, Chalciope?"

"But of course!" exploded Chalciope. "I would do anything to help him, if only it were within my power to do so!"

"Well, then," said Medea slowly, "it is within *my* power to help him out – but for that I'll need your support."

Chalciope joyously agreed to cooperate with her. The sisters then parted, so that Medea might make her arrangements.

Medea went to the slopes of the Caucasus Mountains and gathered the flowers that grew there – saffron-coloured from the blood of Prometheus – and made a magic ointment out of them.

Late in the night, Chalciope sent her son, Argeus, out to the *Argo* with a secret message to Jason, asking him to come and meet her at once.

Jason accompanied the boy back to the palace, where he found Chalciope and Medea waiting for him. Chalciope began by pleading with Jason to abandon the impossible

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task and escape while he still could. "Do not throw away your life! Return home before you die," she implored.

But Jason replied, "It would be unmanly to flee now like a coward, O Princess, after having undergone all these tribulations to reach here. I cannot do that."

Medea now asked, "Do you really think you can do all those feats which my father asks of you?"

"I shall do my best and if not, I shall die in the attempt. There's no question of returning without the Golden Fleece," replied Jason in a voice filled with determination.

Medea now spoke up. "No mortal man can fulfil those tasks and get to the Fleece until I – Medea, the priestess of Hecate, guide him through. Fearless Jason, I shall help you to yoke the fire-breathing bulls and find your way to the Fleece, which lies in a dense grove beyond a high wall, guarded by a dragon that never sleeps."

She then handed him the vial of ointment and said, "Anoint yourself with this, and

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you shall have in you the strength of seven men. Apply it on your shield as well, so that neither fire nor sword can harm you. But you must end your tasks before sunset, for, the invincibility granted by the ointment will last only during the day!"

Jason fell on his knees before Medea and kissed her hand. "I shall not forget what you have done for me, good Medea!" he declared, as he took leave of her.

At sunrise the next day, King Aetes was sitting in his court. His face wore a smile of triumph, for, he was sure that the foolhardy Argonauts would have fled in the night. Just then, a herald came in.

(To continue)

A leaf out of literature

The Railway Children

Three children live an idyllic life with their doting parents. Roberta or Bobbie, the eldest at 11, is a sensitive girl gradually emerging into womanhood; brother Peter is a train-mad, lovable rogue, and Phyllis the youngest is a daffy sprite. Their father is a government official, while their mother writes children's stories. Christmas is spoiled when some gentlemen come to mysteriously take their father away.

Their mother begs them not to press her for details about their father's disappearance. She announces, rather over-brightly, that they will now 'play at being poor'. Soon they move to an isolated cottage in Yorkshire.

Estranged from all comforts, the children set about exploring their new world. Encountering the nearby railway line, they imagine sending their love to their father, via the trains, and begin waving at the trains. They catch the eye of one regular traveller, a nice-looking elderly gentleman, who becomes accustomed to looking out for the trio. They become firm friends with the Station Master, the porter Perks, and even the local doctor.

As the story unfolds, the children find themselves being caught up in many exciting adventures involving the railway and the nearby canal. They make new friends at the station and in the nearby village. Their helpful attitude endears them to the local community.

One day, Bobbie carries home a newspaper-wrapped parcel. Her eyes fall on a news item, and she stumbles on to a terrible secret about her father...

First published in 1906, *The Railway Children* is one of the most famous books of E. Nesbit. His books are recognised as some of the greatest classics of the genre.

Answers

SLYLOCK FOX

Solution: If the guard was blindfolded during the theft, he would not have known the robber's truck was green.

TRY IT...

Page 21
The last piece.
Page 40
Apple, ball, dog, pool, sun and bird
Page 83
Numbers 3 and 5

QUIZ OF THE MONTH

1. Queen Victoria of England.
2. Blue.
3. Don Quixote
4. Myrtale.
5. Valley of the Kings.
6. Yehudi Menuhin.
7. Rig Veda.
8. Fidel Castro of Cuba.
9. Chhattisgarh.
10. Qantas.
11. Down's syndrome.
12. The coronation of King Edward VII
13. Vincent Van Gogh: The Night Cafe, Starry Night, The Potato Eaters.

RIDDLES (Young Talents)

1. Because of his hat-tricks.
2. Power cut.
3. Queen bee.
4. Hollywood.
5. Bank balance.
6. He was giving a running commentary.
7. Ecl-air.
8. Heart attack.

CROSSWORD

Across: 1. Dioxide 6. naked 8. face is the 10. Koala 12. Mercury.
Down: 2. Ink 3. Debit 4. Uniform 5. Cheetah 7. Drink 9. Chase 11. Air.

MIND BOGGLER

With a camera she shoots a picture of her husband, goes into her darkroom,puts the paper in the chemicals for 5 mins, hangs the picture up to dry.

TRUE OR FALSE

1) True 2) False. Lions live in the grassy plains and savannas of sub-Saharan Africa. 3) True. 4) True.

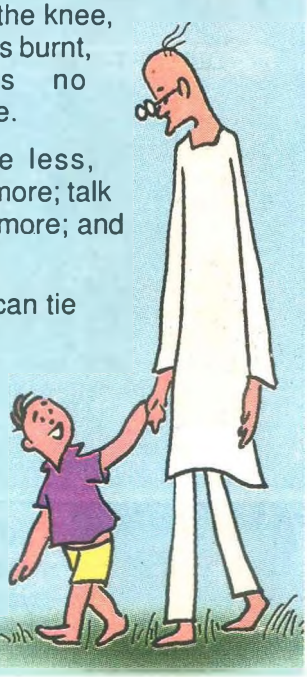
Did You Know?

Bees have five eyes. There are 3 small eyes on the top of a bee's head and 2 larger ones in front.

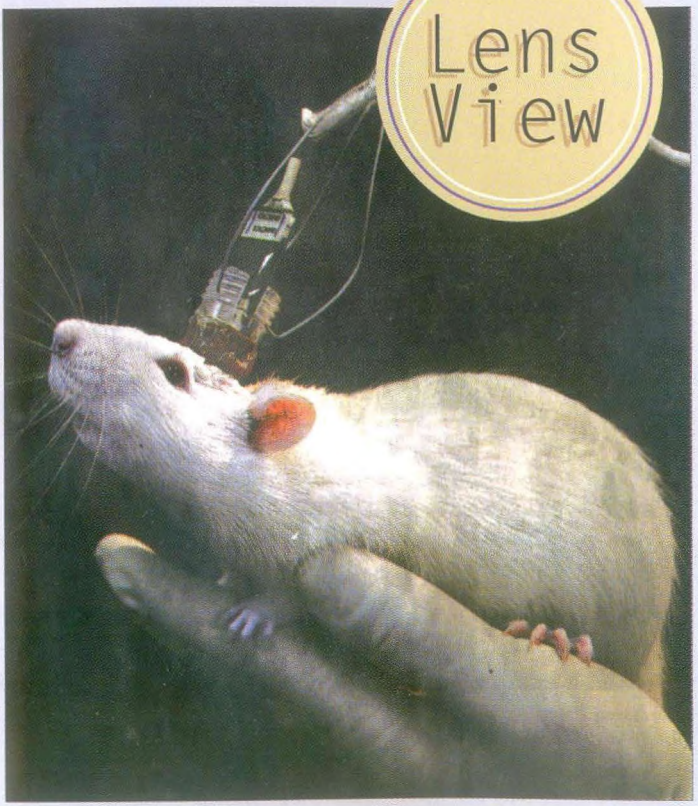
Proverbs

- **The wise man has long ears, big eyes, and a short tongue.**
- If you get up one more time than you fall, you will make it through.
- A good example is like a bell that calls many to church.

- If you don't aspire to great things, you won't attain small things.
- A piece of incense may be as large as the knee, but unless burnt, it emits no fragrance.
- Whine less, breathe more; talk less, say more; hate less, love more; and all good things are yours.
- When spider webs unite, they can tie up a lion.
- A man who wants a good harvest will not sow bad seed.
- **You've got to do your own growing, no matter how tall your grandfather was.**



Lens View



This photograph shows scientists at the laboratory of the East China Normal University in Shanghai recording the memory of a mouse, through sensors connected to its head. They hope to arrive at more conclusive evidence on animal and human intelligence through such experiments.

Servants with Horse and Dog

(Andrea Mantegna)

The most inventive and versatile artist of the 15th century, Andrea Mantegna was born in 1431 in the small village of Isola di Carturo in northern Italy. He was a superb painter of animals - the huge and majestic horse and the dog staring alertly out of the picture at something that has caught its attention are characterized with consummate skill.